The Palawa (Tasmanian Aboriginal) Languages: A Preliminary Discussion

By

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Submitted in fulfilment of the requirements for the degree of Master of Arts

University of Tasmania March 2006

I, John Albert Taylor certify that the thesis contains no material which has been accepted for a degree or diploma by the University or any other institution, except by way of background information and duly acknowledged in the thesis, and to the best of my knowledge and belief no material previously published or written by another person except where due acknowledgement is made in the text of the thesis.

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THESIS ABSTRACT

This thesis provides a preliminary discussion of the Palawa ('Tasmanian Aboriginal') languages. Tasmania as an island has been physically separated from the Australian mainland for over ten millennia, and as one might expect one consequence has been that there have been a number of divergences in the development of its languages from those of the mainland in terms of the pronunciation and range of its segments, its phonology, the semantic content of its lexemes, its word and sentence construction, and its syntax. To adequately cover all these topics, and as well the genetic connections between Palawa and the mainland languages would be a vast enterprise running into many hundreds of pages.

In consequence the thesis has been limited to a number of matters which are basic to an adequate discussion of the topics referred to. The thesis thus provides a description of Tasmania as a geophysical land mass which differs in important respects from most of mainland Australia, and of the important changes which have taken place since its human colonisation in terms of its climate, fauna, and flora. An outline of the languages and dialects spoken at the beginning of the nineteenth century follows, together with a description of Palawa socio-economic organization. As then discussed, the rapid collapse of Palawa culture after Tasmania's invasion by the British, led to the loss and very imperfect preservation of the Palawa languages.

Chapter 6 details the sources of the extant materials with respect to the languages, and provides an overview of studies undertaken to date. Chapter 7 then proceeds to an in depth study of the Palawa lexicons with a view to identifying and determining the segments regularly articulated by Palawa speakers, and the contexts in which those segments were contrastive. This study will incorporate all extant information with respect to the various spelling conventions used in European transcriptions of Palawa words. It will also compare the transcriptions with a view to resolving a number of both latent and patent ambiguities. The principles of historical linguistics will be used to elucidate many such matters.

The thesis will not embark upon a description of Palawa phonology, morphology, the semantic development and content of Palawa lexemes, nor Palawa syntax. Accordingly a discussion of Palawa place names, clan names, and personal names will also not form part of the thesis.

I acknowledge with gratitude the assistance afforded to me by Professor Barry Blake who kindly made available to me vocabularies of the Bunganditj, Warrnambool and Dhudhuroa languages; Hildegarde Toledo who provided translations of passages from Wilhelm Schmidt's *Die tasmanichen Sprachen*, and who in other ways immensely helped my understanding of Schmidt's views and thoughts; the lecturers and staff at Riawunna, the school for Aboriginal Studies at the University of Tasmania; and by my partner, Margaret Duncan. To the names of those persons I add the name of the late Brian Plomley whose painstaking editing, transcribing, and interpretation of the Palawa materials over several decades made the writing of the thesis possible.

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Chapter 1: Introduction and Overview

§ 1.1 Previous Studies by the Author

In 1955 I obtained the degree of Bachelor of Laws with Honours, and in 1963 a Bachelor of Arts, majoring in Philosophy. Subsequently I became a Fellow of the Taxation Institute of Australia.

For most of my life, I have had an interest in place-names, and in particular in their origins. At the request of the Tasmanian State Library, this led to the preparation, and in 1993 the publication by the Library, of *Tasmanian Place Names*, a work containing over thirty thousand entries. In this work, the etymology of names with Anglo-Saxon, Celtic, Iberian, Polynesian, and diverse other progenitors was provided. Tasmania's indigenous names were listed, but not so interpreted. In 1995 I published *Tasmanian Place Names – The Aboriginal Connection.* This work is referred to in § 6.4.9, and included a partly successful attempt to interpret the indigenous names in terms of their derivation and underlying meanings.

In conjunction with my post graduate studies of the Palawa languages, I have investigated and otherwise studied, a number of matters suggested by those studies; or as requested by others as a result of papers delivered to a number of history groups. One such paper was a critique of a number of linguistic matters argued by Windschuttle's in his *The Fabrication of Aboriginal History* (2002). This paper was delivered at the 2003 Launceston forum on the *History Wars* debate, and has since been published in Volume 9 of *Tasmanian Historical Studies* 2004. But in the present context, the major work has been an in-depth study of Tasmania's indigenous place-names, entitled *A Study of the Palawa (Tasmanian Aboriginal) Place Names.* This study is presently available through myself, or through Riawunna, the Tasmanian University's school for Aboriginal Studies. But its publication will be delayed until this thesis has been finally approved.

§ 1.2 Thesis Overview

In this thesis, the Tasmanian Aborigines will be referred to as the 'Palawa', a (south) Eastern speech word for *human being / person.* The word has been adopted by many persons in the present day Tasmanian Aboriginal community as a name for themselves and their cultural heritage, and is gaining increasing recognition within the wider Tasmanian community.

Schmidt's study of the Palawa languages (1952), is the only comprehensive study ever undertaken. Importantly it was undertaken on either side of the First World War, and without the benefit of the materials collated by Plomley (1966, 1976, 1991, 1992, 1994, nd) from his editing and publication of both the Journals of George Augustus Robinson, and the notes of Jorgen Jorgenson. In the event, Schmidt had access to little more than one third of the linguistic materials available to myself, and no access whatsoever to the extensive research conducted into the Australian mainland languages since the Second World War, largely post 1970 as a result of the largesse provided by successive Whitlam governments. (I wish to state as an Australian conscious of the political overtones involved, that my reference to Gough Whitlam, is in no way to be interpreted as in any way whatsoever as sarcastic, sardonic, or ironic.)

Nor has there ever been any comprehensive comparative study of the Palawa and mainland Australian Aboriginal languages. Nevertheless the possibility that there is a deep genetic relationship between the languages has not infrequently been remarked upon (Capell 1968: 2; g Crowley & Dixon 1981: 414; 419), and as well, there is other, really quite compelling evidence of a genetic relationship between the Palawa and Australian mainland peoples, and their languages .

Firstly, and very ostensibly, there is a quite remarkable correspondence in their respective sets of phones, a matter that will be discussed in § 7.1.1. Ostensibly also, there are a large number of apparent cognates in their respective lexicons. Whilst an investigation of the genetic relationship the Pama-Nyungan and Palawa words had with each other cannot be pursued in this thesis, lists of vernacular words and place-names in both language phyla, have been provided for other purposes. Their message is not only suggestive, but rather, perhaps completel y compelling. These tables provide examples of apparent cognates, and can be viewed in Table 4.3.6; § 7.1.1.4; Table 7.4.2(b); Table 7.6.2.1.2(c); Table 7.6.2.2(a); Table 7.6.3.4(a); Table 7.6.8.1; Table 7.6.8.2; § 7.7.2; Table 7.7.2(a); Table 7.7.2(b); Table 7.8.2; and a table of apparent cognates in the Pallangamiddang vocabulary (insert); cf. Crowley & Dixon (1981: § 4). The nineteenth-century indigenous populations of Tasmania were racially of a type very similar to the present day brachycephalic and gracile populations of mainland Australia (§ 4.3.1). The first humans to occupy the Tasmanian land mass must have walked to Tasmania by either crossing or skirting the dry floor of the rift valley today filled by Bass Strait (Johnson and others 1900-1910; §§ 3.1.2, 4.2 & 4.3); and there is ethnographic evidence which links the nineteenth-century Palawa with past and present Australian mainland populations (§ 4.3.1 through to § 4.3.5).

Nevertheless a genetic relationship between the languages has never been validated. My own hypothesis is that there were a limited number of migrations which ported new phonemes, new lexemes and other linguistic developments to Tasmania, and that in linguistic terms, several different genetic relationships can be identified. An important matter is the affect climate had on Tasmania's human prehistory, and thus indirectly on the development of its languages. In human terms, the formation of Bass Strait c10,500 BCE ('before common era'), was neither the first, nor Tasmania's longest period of isolation (§ 3.2). Humans probably reached southern Australia c65,000 BCE, but were unable to reach Tasmania until c40,000 BCE § 3.1.2). Then for fifteen millennia from c30,000 BCE the last ice age again isolated Tasmania (§ 3.2). However a comprehensive exposition of the evidence for my beliefs would involve the preparation of a fully integrated synthesis which provides

(a) relevant geophysical information, including a description of changes in Tasmania's flora and fauna;

(b) relevant information with respect to those climate changes during the late Pleistocene (65,000 BCE – 11,000 BCE) and in the Holocene which are relevant to demographic matters such as population sizes, sustainability, and seasonal movements;

(c) consistently with the foregoing, models which provide a relative chronology with respect to the migrations to and within Tasmania of Aboriginal populations;

(d) the ethnographic and linguistic evidence with respect to the migrations;

(e) assessments and interpretations of the Palawa orthographies as a means of determining the content of the Palawa sound systems;

(f) a determination as to which Palawa segments were contrastive, and in what contexts; and like questions with respect to those segments that were allophones;

(g) the nature of the stressing and accenting systems identified in the Palawa languages;

(h) the interplay of stressing and accenting with Palawa phonemes and phonological changes;

(i) in genetic terms, an assessment of the relationship of the Palawa languages with the mainland Australian languages;

(j) the morphological structures of Palawa words, and if this preserves evidence of earlier morphological structures, whether there is evidence of these earlier structures in the nineteenth-century mainland languages;

(k) the semantic relationship of words for objects and phenomena in the Palawa lexicons, and with their counterparts in the mainland languages;

(l) such data and inferences as can be determined with repect to Palawa syntax;

(m) the nature and strength of the evidence which can be provided by etymological analyses of Palawa place names and clan names.

It became apparent, that a comprehensive study of the Palawa languages presents fields for investigation, that far transcend the much more limited views formed by Schmidt (1952), Dixon (1980), Crowley and Dixon (1981), Capell (1968), and Worms (1960) as the principal commentators on the Palawa languages. Importantly it also became apparent, that in a very real sense, the Palawa languages were living fossils. Their phonology, morphology and grammars, are radically different from those of the Indo-European and Pama-Nyungan languages, and involve a number of matters which so far as I am aware, have never been discussed in linguistic literature. The discussion of these subjects will involve both new methodological approaches, and the use of new linguistic terms. In fact most of the matters that need to be discussed in any adequate study of the languages, have huge ambits. As an example, I myself have recently prepared a study of the Palawa place-names that exceeds 350 A4 pages.

To sum up, a comprehensive description of the Palawa languages, would well exceed the scope of not only a master's thesis, but most doctoral theses. As a result, the subjects discussed, are those referred to below.

§ 1.3 Topics Discussed

Chapter 2 discusses some matters of a preliminary nature with respect to the form and contents of the thesis. Chapter 3 will provide a description of Tasmania in geophysical terms, and outline the changes which took place in its climate, terrain, and flora and fauna during the late Pleistocene, and the Holocene. Chapter 4 will outline the ethnographic evidence for the proposition that there were a number of migrations from the Australian mainland. Chapter 5 will provide a brief survey of the nineteenth-century Palawa languages and dialects; the nineteenth-century socio-economic organization of the Palawa; will discuss the impact on the Palawa languages of the European occupation of Tasmania, including the possible development of pidgin and other languages and dialects post the European invasion. Chapter 6 will identify the sources of the recorded materials with respect to the Palawa languages; and review nineteenth and twentieth century studies of the languages. Chapter 7 will provide detailed comments with respect to the orthographies used by the maritime explorers, early colonists and others to record linguistic materials. In conjunction with these comments, there will be a detailed discussion of the segments articulated in Palawa speech, and of Palawa phones and segments.

The major matters that will not be discussed in the rewritten thesis are Palawa phonology, morphology, syntax, and semantics; and Palawa place names and clan names. There will of necessity be occasional references to these matters. As an example, the instability cross-linguistically of the liquids (Hock 1991: 128-30) strongly affected the articulation of Palawa segments (§ 7.6.2), but in my belief this instability only rarely affected these segments when the product of a semantic change. Accordingly appropriate caveats will be provided when this and other phonological and semantic matters are discussed in Chapter 7, and when necessary there will be like references to morphological and grammatical matters. Place names and clan names provide important information with respect to many aspects of the Palawa languages. They are particularly informative with respect to morphological and semantic matters, but can only usefully be discussed in the context of a detailed description of Palawa morphology and semantics. Accordingly whilst they will be adverted to from time to time, they will be not made the subject of in-depth analyses or discussions in the rewritten thesis.

§ 1.4 Relevance of the Thesis to earlier Studies by Others

Hopefully the thesis will provide a much better understanding of the Palawa languages in a number of important respects;

(a) The thesis provides a description of the geographical and geological factors, and more importantly, the quite dramatic climate changes that determined not only when the discovery of the Tasmanian landmass by Aborigines took place, but as well thereafter profoundly influenced its colonisation, and the successes and failures of competing groups comprised by both the original inhabitants, and subsequently late Pleistocene migrants from the Australian mainland. The matters referred to not only significantly affected the development of semantic diversity within the Palawa languages, but also embraced developments in Palawa phonology, Palawa morphology, and Palawa grammars. These developments have never to the best of my knowledge, ever been considered in connection with their affect on either the Palawa languages, or for that matter, but equally importantly, the Pama-Nyungan languages of mainland Australia, and other language phyla. The reference is undoubtedly of the utmost importance to an assessment of the genetic links the Palawa languages almost certainly have with the Pama-Nyungan languages of mainland Australia. Unfortunately the logistical limits imposed on the ambit of the thesis as a thesis, preclude any adequate investigation of the possibilities referred to.

(b) There has been a widespread belief that the Palawa populations were in socio-economic terms, organised at their highest level as 'tribes', using that term in the technical sense that it was used by professional anthropologists, and in consequence by well educated persons in the twentieth century, and is still so used. The contrary view advanced by Rhys Jones (1974), was that in Tasmania there tribes that in terms of their role and organisation, were similar to those of mainland Australia in historical times. That view has since been uncritically accepted by historians and others, and is mistaken. Cogent linguistic evidence to that effect will be presented in § 5.4 and following. The Palawa at their highest level of socio-economic organization associated together as (probably) exogamous clans of between (usually) five and seven sometimes extended families. The point is crucial to any proper understanding of the Palawa languages as language groups, and consequently not as distinct languages, their nineteenth-century geographical provenances, the relationships of the various language groups inter se, and the overall and continuing development of the Palawa languages throughout Tasmania's long prehistory.

(c) The thesis comprehensively reviews, and supplements previously published information with respect to the sources and quality of the extant vocabularies of the Palawa languages, and of so much of the consecutive discourse in the form of sentences and songs, as was recorded.

(d) The various orthographies used by the European recorders of the Palawa vocabularies differed, not only because French orthography from the Renaissance onwards, has in a number of significant respects always differed from English orthographies, but because English spelling conventions did not become settled until after the introduction of universal education early in the twentieth century. As emphatically and correctly stated by Crowley and Dixon (1981: passim), the recovery of the journals of George Augustus Robinson (1966), coupled with Plomley's meticulous editing and publication of those journals, demonstrates the need for a comprehensive assessment, and elucidation of those orthographies. More than 60% of the thesis has been devoted to this task, with some rather surprising and unexpected results (See Ch.7).

(e) Partly as a result, the thesis corrects the mistaken etymological approaches adopted by Plomley in his thesaurus of Palawa vernacular words (1972).

(f) Partly as a further result, it also corrects, and/or at other times suitably qualifies a number of views formed by Crowley and Dixon (1981) with respect to the Palawa languages. (See Ch.7). They themselves frankly concede the possibility that their views may need

correction as the result of a more painstaking, and in depth investigation, of the Palawa lexicons.

(g) The thesis identifies the handicaps suffered by Schmidt (1952), as a result of the lack of the now available linguistic materials when he attempted his little known, rarely discussed, but comprehensive and in a number of respects brilliant assessments of significant features of the Palawa languages. It accords him the praise he undoubtedly deserves. At the same time, it provides some necessary caveats with respect to some of the views he expressed.

Chapter 2: Terminology and Interpretative Matters

§ 2.1 General Observations

The methodologies adopted to enable an investigation of the Palawa languages include some approaches that will not always be familiar in linguistic circles. The use of templates to verify the form of proto Australian and other lexemes is an example (§ 2.2.11). It has also been necessary to both adapt and accordingly to modify the connotations usually accorded to certain linguistic terms in current use, and to create some new terms. Accordingly this chapter provides a glossary of terms which are novel or unusual, or which have been used with connotations which might be thought to differ from their conventional use. Departures from the norm will be avoided so far as possible. Unless otherwise indicated, linguistic terms will have the same connotations as those used and defined by Hock (1991).

§ 2.2 Linguistic Terminology

§ 2.2.1 'Words'; 'Lexemes'; 'Word Elements'

There is little reason to believe that what are ostensibly transcriptions of Palawa **words** should not be interpreted in most cases as single meaningful units in much the same way as English words. As in English, and commonly in German, there are compound words. Thus in <ree-mutha> = *fist,* <ree> is a classifier which refers to the hand as a general category of objects, the hyphen indicates a hiatus in the articulation of the word, and <mutha> is an item which identifies the fist as a particular configuration o f the hand when used as a threat, weapon or implement. (All Palawa words cited will be found in *A word-list of the Tasmanian aboriginal languages* (Plomley 1976), hereafter referred to as *Wordlist.* The page reference for <ree-mutha> is 87). In verification of the analysis provided, the form of <ree-mutha> can be compared with the other words for *hand* listed in *Wordlist.* Milligan in particular transcribed a number of words as phrases. Some of these transcriptions can be so interpreted, but more typically they record compound words. Thus Milligan's <ri lia> = *mains* (p.86) as a 'phrase' can be compared with Jorgenson's <rilia> = *hand,* French <riri> = *mains,* and French <ri-lia> = *hand.* In each of these words <ri> means *hand,* and <lia / ri> is a qualifier which indicates a plurality.

As usually defined in English dictionaries '**lexeme**' is a morpheme which in itself constitutes a single meaningful unit. As such it can be a single word, or an affix in a word. A lexeme can thus be monosyllabic, multi syllabic, and on occasions a single segment. When multisyllabic in form

the progenitor of a lexeme usually consists of several word elements, but can evidence a monosyllabic word element which expanded as a result of epenthesis. Thus in the words for *hand* <lare> (*lar) is a cognate of <lia>, and evidences 'colouring' (Crystal 1995: 245) <re> in the word element evidences the accretion of an epenthetic rhotic and a sound best described as a form of schwa. <tur.**lare**> = *thigh* (*Wordlist*: 91) provides an example in which the bolded element was articulated in its extended form.

The phrase '**word element**' will be used to indicate a usually monosyllabic unit which in its articulation is distinguished from one or more other word elements in the same word.

§ 2.2.2 'primary reduplication'; 'secondary reduplication'; 'doubly reduplicated words'; 'arms'; 'limbs'

The term 'reduplication' is used of words in its usual sense of 'making double' or 'twofold'. However, a distinction will sometimes be drawn between '**primary reduplication**', and '**secondary reduplication**'. The former refers to the reduplication of utterances predicated by Deacon (1988) as a product of hominid speech. It is his hypothesis that to ensure that utterances were understood by listeners they were repeated. His explanation suggests that the repetitions may have been synaptic, and that to that extent they were involuntary. **Secondary reduplication** refers to the use of reduplication by 'Modern Man' (*homo sapiens sapiens*) as a semantic device typically to indicate an aspect of magnitude; a duality or plurality, and/or a repetitive or continuing activity. The end product of reduplication is a multi-syllabic lexeme in which typically each **limb** preserves one of the reduplicated utterances.

Secondary reduplication can involve the reduplication of a whole lexeme, and words of this type will be referred to as '**doubly reduplicated words**'. In these words the first lexeme will be referred to as the first **arm**, and its reduplication as the second **arm.** Thus whilst an exposition cannot be fully pursued in this thesis, it is believed that <han.ner.me.kar.len.ner> = *hand* (*Wordlist*: 85) provides an example of the matters referred to. The second arm has been distinguished by underlining, and will be so used throughout the thesis. In each arm one or more of the reduplicated limbs has been preserved, and as a result an arm is often multisyllabic. However very typically, eclipsis and epenthetic alliteration in the form of anticipatory or perseverant assimilation can partly obscure the original form of the limbs in the arms.

§ 2.2.3 'classifiers'; 'items'; 'qualifiers 'locative' & 'conventional' classifiers 'explanatory additions'

As noted above, compound words have two or more 'lexemes'. In many Palawa words the first lexeme denoted a general category of objects or phenomena which includes the object or phenomenon to be identified, and the second lexeme more specifically identifies the object or phenomenon. <ree-mutha> (*Wordlist*: 87) already cited, provides an example. Lexemes of the first type will be referred to as '**classifiers**', and lexemes of the second type as '**items**'. In some other words a following lexeme has an adjectival role, and will be referred to as a '**qualifier**'. <**rilia**> (p.86) provides an example. Whilst unusual in Palawa, words can include lexemes which as distinguishable units perform all three roles.

In the case of place names, the classifier was often the name of another more prominent, or more significant, nearby feature. In these cases the classifier will be referred to as a '**locative** classifier'. An example is ***Cree.wer.****lae.dy* as a name for Mt. Nelson (see Plomley 1994 for Palawa place names), in which the bolded elements refer to the Derwent Estuary, and the remaining elements identify the feature as a mountain of modest size. In the example given, the classifier can be compared with *Kree.wer* as a name for the Estuary adopted as a name for Little Sandy Bay, and with <le.at.ter> as a word for ***hill*** (*Wordlist*: 251). Over time locative classifiers became bleached, and ultimately lost their semantic meaning. Classifiers of this type will be referred to as '**conventional** classifiers'. Thus in ***Teen.ne.vuth***, a name for Southport Island located near the southern end of D'Entrecasteaux Channel (Plomley 1994), the bolded elements once referred to an open bay or beach. The lexeme was adopted as a conventional classifier, and <vuth> added as an item which identified the feature as an island. In this example, the classifier can be compared with names such as ***Dray.ter*** (Great Oyster Bay); ***Try.ler.rer*** (Whitehorses Beach); and ***Timgarick*** (the coastal tract behind Ocean Beach); and the item with the suffixes in *Green.ny.**vage.ge*** (Partridge Is.); and *Poe.no.**var*** (Friendly Is.).

Many lexemes which present in words and place names as items, are often better categorised as '**explanatory additions**'. In other words an intruding population often adopted a pre-existing name for a geophysical feature but, not understanding its semantic meaning, added a further lexeme which for them served the same role as an item. Thus in *Promaner.**line*** (Snug Bay), the first lexeme is an ancient name for the Bay, and the bolded element a more modern lexeme which means *bay / inlet / tidal estuary*. ***Promaner*** can be compared with ***Premaydena*** (Port Arthur) and

Promenalinah (Browns River, which has a tidal estuary) and the bolded lexeme with both *Promenalinah* and *Kuta Linah* (*Jordan River,* which also has a tidal estuary). In <ree**mutta**> = *hand* and <tc.ver.**mur.rick**> = *wrist* the bolded elements present as explanatory additions, but may have been incorporated as items.

§ 2.2.4 'pronunciation shifts'

Phonological changes in words can be the product of a number of factors. Many of these are the product of slight changes in the articulation of a segment. Thus shifts from [**b**] to [**m**] are well evidenced cross linguistically, and in Palawa (§ 7.6.1.2). The lenition of segments produced changes. Likewise palatalisation and labiovelarization are well evidenced cross linguistically, and in Palawa (§ 7.6.7). It is not unlikely that some of the changes in Palawa words were conditioned changes comparable with, for example, umlaut as a vowel change in German and French, and e.g. with the consonant changes predicated by Grimm's Law (Hock 1991: 37). All of these changes will be referred to as '**pronunciation shifts**'.

'eclipsis': 'epethensis'; 'assimilation'; 'dissimulation'

Phonological changes are also the product of eclipsis, epethensis, assimilation and dissimulation. The phrase 'pronunciation shift' will not be used to connote those phonological changes which are their products.

'alliteration'

Alliteration as a factor in phonological change can be a product of both anticipatory and perseverant assimilation. As a term, it will be used as a reference to both types of assimilation.

'semantic changes'; 'semantic assimilation'

The expression '**semantic changes**' will be used as a reference to a phonological change which affected the semantic content of a lexeme. Some of these changes would appear to have been semi-conscious changes. In other cases pronunciation shifts produced phonological shifts which were then preserved as semantic changes. Both types will be referred to as semantic changes. The term '**semantic assimilation**' will be used to denote the phonological alteration of an existing word element to better accord with a lexeme with well understood semantic connotations. Thus in the Nara languages the articulation of suffixes were often altered to /**lar**^{r}/ to indicate *large size.*

§ 2.2.5 'phonological progressions'

A natural pronunciation shift involves a change in the articulation of a segment in a way which produces a sound which is ultimately recognised by the speakers of a language as a different segment. Thus it is recognised cross linguistically that the nasalisation of the bilabial stop [**b**] produces bilabial nasal [**m**]. A segment so produced can in its turn be affected by further pronunciation shifts. Thus the articulation of [**m**] can change to [**n**]. Alternatively eclipsis followed by, for example, perseverant assimilation produces a phonological change, and in certain contexts the patterns of change so produced are clearly recognisable. The acceptance of a sound by the speakers of a language as a different segment potentially converts the semantic role of the new sound from that of an allophone, to that of a phoneme. The lexicon of a particular language not infrequently preserves evidence of a succession of such shifts, and the Palawa lexicons in themselves provide many examples (§ 7.6, and more particularly §§ 7.6.3.4; 7.6.3.6; 7.6.4.3 & 7.6.7.2). Chains of pronunciation shifts thus evidence **phonological progressions**. The progressions can be likened to trails, and used to establish genetic links between, for example, the dialects within a single language, or between, for example, several languages within a family of languages, and ultimately between language phyla. When appropriately evidenced and explained, the chains can also evidence the presence or absence of pervasive semantic changes. References to single shifts in a phonological progression are replete in linguistic literature (for example see the OED; Onions 1966; Ekwall 1936; Nicolaisen 1976; Dixon 1980): but so far as I am aware the utility of recognising the progressions has never been graced by the use of a universally recognised linguistic term.

Phonological progressions are particularly useful as a means of mapping and understanding both the recorded form and the development of lexemes in extinct languages. The spelling conventions used in the recording of Palawa segments is imperfectly known (§ 7.1), and as result there is some uncertainty as to how many of the segments ostensibly recorded, were in fact articulated. Whilst phonological progressions can not completely take the place of phonetic representations, they can serve as a guide and check on the various orthographies used by the European recorders. The following exercise will illustrate the various points made. It will be appreciated that for the purposes of the exercise, the statements with respect to semantic changes will have to be accepted at this stage without a full exposition.

A Palawa word for *river* was NE: gar <mor.ter.moon.ner>. A name for the South Esk River in northern Tasmania was *Moor.ron.noe*, and for the Murray River on the mainland *Murrumbiggee*.

It is believed that all three words have the same late Pleistocene progenitor, and ultimately an earlier proto Australian, perhaps proto African progenitor that as a template (§ 2.2.11) can be transcribed in the form $((p_1Vr_1ŋ_1) + (p_1Vr_1ŋ_1) + (p_1Vr_1ŋ_1))$. Be that as it may the names are consistent with phonological progressions of each of the recorded segments in the words along the following lines:

The first limb
<**m**> as the 1st segment evidences [**p/b**] > [**m**] as a semantic change
the first <**o**> and the <**u**> preserve the vowel in the proto word
the second <**o**> in <Moor> may be epenthetic, evidencing dissimilation of the first <**o**>; but other explanations are open
<**r**> preserves the rhotic in the proto word

The second limb
<**r**> evidences [**p/b**] > [**ø**] > [**r**] and thus eclipsis, followed by epenthetic alliteration of [**r**] in the first limb
<**t**> evidences [**p/b**] > [**ø**] > [**r**] > [**l**] > [**d**] > [**t**] and thus eclipsis, followed by epenthetic alliteration, followed by pronunciation shifts ultimately preserved as an alveolar stop to indicate *large size.*
<**er / o / u**> preserve the vowel in the proto word
<**n / m**> evidences [**ŋ**] > [**n**] as a pronunciation shift which involved lenition. The voiced segment [**b**] which followed led to anticipatory assimilation of the voicing of [**n**] > [**m**].

The third limb
<moon> + <ner>
<**m**> evidences [**p/b**] > [**m**] as a pronunciation shift preserved as a semantic change
the 1st <**o**> preserves the vowel in the proto word
the 2nd <**o**> evidences the lenition of [**r**] in the proto word
<**n**> evidences the lenition of [**ŋ**] > [**n**]
the next <**n**> evidences accenting which produced an epenthetic sound
<**er**> evidences schwa as a product of the accenting of [**n**]

<noe>
<**n**> evidences either [**p/b**] > [**m**] > [**n**] the last change involving perseverant assimilation;
or [**p/b**] > [**ø**] > [n] evidencing eclipsis, followed by epenthetic alliteration
<**o**> preserves the vowel in the proto word
<**e**> evidences the lenition of [**r**] in the proto word.

<biggee>
<**b**> preserves the same segment in the proto word
<**i**> preserves the vowel in the proto word
the 1st <**g**> evidences the lenition of [**ŋ**] in the proto word
the 2nd <**g**> evidences its accenting
<**ee**> is epenthetic, and a product of accenting.

§ 2.2.6 'comparative analysis'; 'etymological analysis'

The attempt to confine this thesis to a discussion of matters as outlined in § 1.2 imposes at times rigid and artificial, and at times frustrating limitations on the discussion of orthographical and phonetic matters. The discussion of Palawa phonetics in Chapter 7 and elsewhere has thus been virtually limited to **comparative analyses** of words in the Palawa lexicons, and rarely and only coincidentally proceeds to discussions of phonological matters . In other words such information as the European recorders themselves provided with respect to the spelling conventions they adopted will typically be only discussed, and assessed in its character as raw data. The transcriptions of the various recorders will be compared with a view to identifying the segments denoted by the letters of the alphabet and the diacritics used in those transcriptions. Thirdly the principles of historical linguistics will be used as an aid. However the analyses will generally ignore the inferences that might otherwise flow from a knowledge of the semantic changes which affected the development of the Palawa lexicons, and/or from any knowledge of the underlying morphology of the words in its lexicons. Importantly whilst the ostensibly remarkable similarity in the range of phones articulated in the Pama-Nyungan and Palawa languages can provide inspiration, that similarity has not, and should never be presumed as a fact. Thus it should not be used as a licence to predicate that a Palawa sound as transcribed, was articulated in the same letter of the alphabet was in eighteenth and nineteenth-century French and English. Nor for that matter that the segments ostensibly transcribed, represent the same phones in the Pama-Nyungan languages. For example it will be argued that many transcriptions record a schwa or some other indeterminate sound which had little or no similarity to the French or English pronunciation of the segment ostensibly transcribed (§ 7.8.3), and that the letter used in the transcription was often used for want of a suitable symbol which could more adequately portray the sound identified.

Acceptance of the transcriptions does not avoid the need for readers of the thesis to keep in mind that studies of the Palawa languages never have, and cannot avoid studies which provide much deeper insights than those provided by comparative analysis. The reference is not only to my own as yet unpublished studies, but to the published works of Schmidt (1952), and of Crowley and Dixon (1981) as the two leading examples. To summarise, the use of the phrase '**etymological analysis**' in this thesis usually implies that a fuller comprehension of the lexemes under discussion depends on an understanding of morphological matters, and/or of semantic changes, and/or of comparisons with lexemes in the Pama-Nyungan lexicons, matters which will only rarely be canvassed in this thesis.

§ 2.2.7 'post-alveolar affricates'

Transcriptions of **<dr>** and **<tr>** in word-initial position are relatively common in Palawa words. For the reasons provided in § 7.6.3.4, it is believed that the transcriptions evidence the articulation of a post alveolar fricative, and not a consonant cluster. The segment is not referred to in connection with the Palawa languages, and so far as I am aware does not appear to have been recognised in commentaries on the Pama-Nyungan languages. It will be referred to as a **'post-alveolar affricate'**.

§ 2.2.8 'proto Australian'

The separation of Tasmania from the Australian mainland post 10,500 BCE means that any references to proto lexemes which are ancestral to both Pama-Nyungan and Palawa words almost necessarily refer to lexemes formed in the Pleistocene. The words in the lexicon(s) of the Aborigines who arrived in Tasmania before the last glacial were formed before 30,000 BCE, and were reflexes of older lexemes formed before 40,000 BCE. The use of the phrase 'proto Australian' will be used consistently as a reference to the forms of words and other lexemes as spoken prior to 40,000 BCE. Hypothetically, such a reference can include a reference to a progenitor brought to Australia by its first human inhabitants, or ported here by later immigrants.

§ 2.2.9 'south eastern Australian languages'

Any complete description of the Palawa languages must necessarily provide comparisons of words and linguistic features of those languages, with words and features in the Aboriginal languages of the Australian mainland. There are approximately 250 distinct Australian languages, and they can be divided into some 26 different family-like groups *Macquarie Aboriginal Words* (Thieberger & McGregor 1994: xi), referred to hereafter as *Macquarie*. For logistical reasons, it has been necessary to limit the number of mainland languages investigated. Assuming that the Palawa had contacts with mainland Aborigines from time to time before the formation of Bass Strait, and having regard to the possibility that there may thus be genetic connections, it made sense to limit the comparisons to those Pama-Nyungan languages once spoken in geographical regions directly opposite Tasmania across Bass Strait. But to ensure an adequate coverage, the net has in fact, been thrown somewhat wider by including languages spoken in South Australia and New South Wales. Preferably the lexicons of the languages chosen would be of reasonable size, and in terms of a basic vocabulary substantially overlap with each other. *Macquarie* was a ready source of lexical materials in that respect. It has been supplemented by glossaries of, and other

linguistic information with respect to the Bunganditj (Blake nd), Dhudhuroa (Blake & Reid nd), Warrnambool (Blake 2000) Woiwurrung (Blake 1991), and Palangamiddang (Blake & Reid 1999) languages. Table 2.2.9 names and locates the languages involved

Recently Clark and Heydon published a *Dictionary of Aboriginal Placenames of Victoria* (2002). This publication has also been consulted, and when appropriate Victorian place names have been cited.

Table 2.2.9

South Australia	Diyari; Kaurna; Bunganditj
Victoria	Dhudhuroa; Palangamiddang; Wembawemba; Warrnambool; Woiwurrung
NSW	Bundjalung; Paakantyi; Sydney; Ngiyampaa; Wiradjuri

§ 2.2.10 *'Wordlist'; 'Macquarie'; 'Place Names'*

Constant reference will be made in the thesis to certain publications. To avoid compendious references to Plomley's *A word-list of the Tasmanian aboriginal languages* (1976) the work will be referred to as ***Wordlist***. Similarly *Macquarie Aboriginal Words* (Thieberger & McGregor 1994) will be referred to as ***Macquarie***. Most of the indigenous place names for Tasmania were published in *Tasmanian Aboriginal Place Names* (Plomley 1994). The publication will be referred to as ***Place Names***.

§ 2.2.11 'templates'

The term 'template' has no generally accepted meaning in linguistic literature. But templates are frequently used to represent the structuring of word elements. Thus a template in the form CVC is used cross-linguistically to represent the phonological structure of certain types of monosyllabic word elements. The conventional method of representing phonemes in the lexicons of the Pama-Nyungan and other Australian Aboriginal languages has more typically involved the substitution of phonetic symbols for the segments transcribed by a European recorder. Generally speaking, phonemes and allophones are not distinguished in the phonetic representations. The symbols used suggest that the Aboriginal articulation of a particular segment closely accords with the articulation of the same segment in the mother tongue of the European recorder. But such an assumption has validity only insofar as the phonetic representations of the more ambiguous

transcriptions correctly interpret the pronunciation of segments. The isolation of the Palawa languages exceeded ten millennia. Even with the advantage of their preservation in writing there are uncertainties with respect to the pronunciation of Latin, and even greater uncertainty with respect to the pronunciation of classical Greek. For the reasons given in §§ 2.2.6 and 2.7, only rarely can the substitution of phonetic symbols for transcribed segments provide a completely trustworthy and accordingly acceptable approach to the phonological interpretation of Palawa consonants, semi-vowels, and vowels. Whilst the use of templates of the type described below has a much greater utility in the making of etymological analyses, their use from time to time in this preliminary description of the Palawa languages can have its advantages. The comment in no way predicates that templates as such provide a more trustworthy approach to pronunciation than do phonetic interpretations. Indeed their purpose is usually to illustrate the earlier form of a lexeme, not its current pronunciation. Their validity must ultimately depend on the validity of either an etymological, or a comparative analysis, and for the purposes of this thesis their wider utility will usually have to be left in suspense.

French transcriptions of some (south) Eastern speech words for *hands / hand* provide examples (*Wordlist*: 86). Both <rilia> and <riri> were glossed as *hands,* and <riry> was glossed as *hand.* All three words fit a template in the form $(\mathbf{r}_1\mathbf{i}_1) + (\mathbf{l}^{\mathbf{y}}{}_2)$. In the template substrate '$_1$' indicates the articulation of the segment transcribed. Substrate '$_2$' indicates the articulation in some words of the segment transcribed, and in others of another segment which evidences a phonological progression. Comparative analysis of potentially cognate lexemes indicates that the palatalised lateral in the second word element in some words changed as a result of dissimilation. In this case one of the changes may have been a product of metathesis. More probably all the changes evidence the instability of liquids as segments (Hock 1991: 108), and the unaccented articulation of an allophone which was identified by the French recorder as a rhotic. To take two further examples, the evolution of <rabalga> from a proto word very similar to <drar.bur.ic> can be illustrated by a template, but a demonstration of the phonological progressions involved will not be comprehensively convincing except in the context of an understanding of the underlying morphology of the words. Arguably there is a more distant connection between all the various Palawa words for *hand*; and the numerals SE: mj <marah> = *five*; and NE: gm <karde> = *cinq* (*Wordlist*: 334). But whilst the arguments to be advanced can be illustrated by templates, it would need to be within the context of a discussion of pervasive semantic changes, and a common underlying morphology. The exercise provided at the end of § 2.2.5 illustrates how templates can

be used in conjunction with phonological progressions to elucidate the origins, development, and pronunciation of Aboriginal lexemes.

§ 2.2.12 The Geographical provenance of the Palawa dialects 'Nara' speech; 'Mara' speech

It is usually inappropriate to categorise a Palawa dialect as a dialect spoken by the speakers of a specific language (§ 5.2). On the basis of a comprehensive etymological analysis of the Palawa lexicons Schmidt placed Palawa words within a number of language groups which he located by reference to a number of geographical regions. I endorse his conclusions in this respect (1952: 54-60), as have others (Crowley & Dixon 1981: § 1.4). Accordingly, the better course is to identify the geographical provenance of a dialect and, on the basis of that provenance and such other information as may be available, classify the dialect as a dialect with an affinity with the dominant language group of a geographical region. Table 2.2.12 identifies the regions. Hereafter most transcriptions of Palawa words will be preceded by a set of symbols. The compass point provided can be used in conjunction with Table 2.2.12 to provisionally identify the language group to which the word ostensibly belongs.

The descriptions of the regions provided in Table 2.2.12 are my own, should be treated merely as a guide, and are not to be interpreted as in any way defining language boundaries (§ 5.2). Schmidt proposed five language groups (1952: 54-60), which he referred to as '**West-sprache**' (in my terminology 'Western speech' and 'North Western speech'); '**Nord-sprache**' ('Northern Speech'); '**Nordost-sprache**' ('North Eastern speech'); '**Mittelost-sprache**' ('Eastern speech'); and '**Südost-sprache**' ('(south) Eastern speech'). The historical evidence (§§ 5.5.2 & 5.5.3) is uniformly to the effect that the dialects spoken in different parts of Tasmania were mutually unintelligible, and in particular that the Palawa from western Tasmania were unable to converse with the Palawa from eastern Tasmania. It is supported by ethnographic evidence (§ 4.3). Whilst not discussed in any depth in this thesis, my own etymological analyses support the historical and ethnographic evidence, as do the etymological analyses of Schmidt, and of Crowley and Dixon. The total evidence points to an expansion of the North Eastern speech and Eastern speech clans at the expense of the Western speech and Northern speech speakers. That expansion would appear to have been still preceding when the British colonists arrived. The creation of (south) Eastern speech is part of the evidence. It will be convenient from time to time to distinguish between the expanding clans as a group ('**Mara**' speakers'), and the Western, North Western, and Northern speech clans ('**Nara** speakers'). These names have been coined to reflect the fact that in many

words in the Nara languages and dialects there was a shift in the articulation of [**m**] in word-initial position to [**n**].

Table 2.2.12

SE	(south) Eastern speech	Mara + Nara (fused)	Western side of the Derwent Estuary S to South Cape and the Huon River basin
W	Western speech	Nara	South western and western coast from South Cape to the Pieman River, and as a separate region much of the Derwent Valley
NW	North Western speech	Nara	Pieman River to the Inglis River
N	Northern speech	Nara	Inglis River to Port Sorell and S to the Central Plateau
NE	North eastern speech	Mara	Port Sorell to Falmouth including the Northern Midlands, Fingal Valley & the north eastern highlands
E	Eastern speech	Mara	Eastern and south eastern coast west including the Southern Midlands, the eastern shore of the Derwent Estuary, the eastern ranges, and the catchment of the Ouse River

§ 2.2.13 Identification of the European recorders

In *Wordlist* and Occasional Paper No.3 (Plomley 1994) Plomley provides most of the recorded information with respect to the geographical provenance of the words and place names listed by him, together with information as to the Aboriginal informant when this is available. When available, the name of the informant often provides indirect information as to his or her clan, and therefore with respect to a dialect and language group. Usefully in *Wordlist* (pp.77-80), Plomley provides tables of the abbreviations used by him to indicate the region where a word was used, the Aboriginal informant, and the European recorder. The identity of the European recorder is important information because of the differing orthographies used to transcribe Palawa words. Readers will not wish to have to make constant reference to Plomley's tables. Accordingly, Table 2.2.12 provides a simplified set of symbols which identifies the European recorder by sets of initials. In tables of Palawa words, the symbols follow the geographical provenance reference.

Table 2.2.13

bd	William Bedford
bk	James Backhouse
br	Robert Brown
ck	William Anderson and David Samwell (Cook's expedition)

Table 2.2.13 continues

cr	Charles Robinson
cu	Allan Cunningham
fr	The French maritime explorers
gar	George Augustus Robinson
gm	J.P. Gaimard (French)
jj	Jorgen Jorgenson
lh	Alexander McGeary
mj	Joseph Milligan
rb	R.A. Roberts
sc	Thomas Scott
sn	Charles Sterling
wb	George Washington Walker
wn	Peter Fisher

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§ 2.3 Other Terminology

§ 2.3.1 'glacial'; 'interglacial'; 'stadial'; 'interstadial'

In the parlance of climatologists, geologists and archaeologists, '**glacials**' are ice ages (Gwinn 1986: vol.6, p.230), and '**interglacials**' are long periods of warmer, and generally wetter, climatic conditions which separate the end of one glacial from the beginning of a succeeding glacial (Gwinn 1986: vol.19, p.904). There are no universally accepted criteria which can be used to determine when a glacial age can be deemed to have either ended or begun, and in any event the onset or waning of a glacial in a particular region can be affected by the existence or lack of ocean currents, blocking land masses, and other local circumstances. As a result scientists often prefer to define climatic events by reference to glacial peaks. In the context of Australian prehistory, 65,000 BCE is usually accepted as an ice age peak; 60,000 BCE as the end of the second last glacial; 30,000 BCE as the end of an interglacial and beginning of the last glacial; 18,000 BCE as the peak of the last glacial; and 11,000 BCE as the beginning of the current interglacial.

Shorter and more temporary periods of marked variations in temperatures and rainfall are referred to as '**interstadials**' and '**stadials**' (Gwinn 1986: vol.19, p.904). Many events so categorised are local, as distinct from world wide events. From 15,000 BCE to 13,000 BCE south eastern Australia experienced warm summers not dissimilar to our own, and with it a higher rainfall than that of the last glacial. The period is thus referred to as an '**interstadial**'. The next two millennia saw a reversion to a colder and more arid climate. This period has been categorised as a '**stadial**'. It lasted until the end of the Pleistocene, and the advent of the Holocene.

§ 2.3.2 'Pleistocene'; 'Holocene'; 'late Pleistocene'

For classificatory purposes, the Earth's geologic history is divided into a number of time periods. The current period is known as the 'Quaternary'. The Quaternary is subdivided into two 'epochs', viz the **'Pleistocene Epoch'** and the **'Holocene Epoch'.** The Pleistocene Epoch was a period of successive ice ages and interglacials estimated to have commenced 1,700,000 BCE (Gwinn 1986: vol.9, p.516). Consistently with this rationale, the Holocene Epoch is probably an interglacial that will be followed in due course by another ice age. There are different conclusions as to when the Pleistocene ended, and the Holocene began. For the purposes of the thesis, 11,000 BCE will be treated as the end of the Pleistocene, and the beginning of the Holocene. References to the **'late Pleistocene'** refer to the period from 60,000 BCE until the advent of the Holocene.

§ 2.3.3 'tectonic plates'; 'rift valleys'; 'graben'

The plate tectonics theory explains that the crust and uppermost mantle of the Earth as a planet, is divided into twelve or more rigid **'tectonic plates'** which drift continuously on partially molten rock (Gwinn 1986: Vol.l l p.601). When the edges of one or more plates collide, one of the edges is often forced downwards and under another edge, creating a depression which is referred to as a **rift valley** (Gwinn 1986: vol.10, p.65).

Graben are untilted blocks of the Earth's crust which in relation to other untilted and formerly contiguous blocks have become lower. The geological process is referred to as 'faulting' (Gwinn 1986: vol.6, p.74).

§ 2.4 Abbreviations

The following abbreviations have been used in the thesis.

BCE	'before common era'
pA	'proto Australian'
OScand	'Old Scandinavian'
OE	'Old English'
ME	'Middle English'
IE	'Indo-European'
OED	'Oxford English Dictionary' (*The Shorter Oxford English Dictionary* 1973, rev. edn, Clarendon Press, Oxford)

§ 2.5 Phonemic representations

It is customary when describing a language to provide phonemic representations of the segments transcribed in words. Phonetic transcriptions of this type would seem almost a necessity, when as in the case of Palawa the languages are extinct, their lexicons were recorded in manuscript form by persons who were without linguistic training, and who not infrequently used different spelling conventions. Crowley and Dixon (1981: 406) believed that the difficulties provided by the orthographies are such that 'it would not be worthwhile trying to reconstitute the phonetic form of *every* word' (my italics), and provide examples to support the point. I believe the statement indicates a failure on their part to appreciate the immensity of the problems involved.

I commence by indicating that the difficulties are not wholly, probably not even mainly, attributable to differences in the European orthographies, or to carelessness or linguistic naivety on the part of the European recorders. Milligan states (1890: 9-10):

> The habit of gesticulation ... exerted a further modifying effect, producing, as it did, carelessness and laxity of articulation, and in the application and pronunciation of words. *The last named irregularity, namely, the distinctly different pronunciation of a word by the same person on different occasions to convey the same idea is very perplexing* ... (my italics)

Without accepting Milligan's surmises, his observations with respect to 'distinctly different' pronunciations are amply borne out by an examination of the Palawa lexicons. There will be constant references in Chapter 7 to ascertained and suspected differences in the articulation of apparently cognate words. Most of the references in Chapter 7 are illustrated by tables of appropriately selected words. However the discussion of transcriptions of **<h>** in § 7.6.5 dramatically illustrates not only the immense variability in the Palawa articulation of alveolar stops, laminal stops, and a number of associated fricatives, but also that stops and fricatives, which in English, French and often in Pama-Nyungan are segments and phonemes, were in Palawa associated as bundles of undifferentiated allophones. Table 7.6.5(a) in the same subsection (p.216) provides examples of the variability in the Palawa articulation of stops and fricatives, as well the dorso-velar nasal, and its lenited forms; and illustrate differences in their interpretation by French speakers on the one hand, and English speakers on the other. The manifold problems which arise with respect to transcriptions of **<t/d>** in Palawa words is outlined in § 7.1 (second paragraph). Another particularly convincing example is provided by the words listed in Table 7.6.6 (p.218) and its accompanying discussion of ostensibly transcribed geminate consonants.

Nevertheless as Chapter 7 will also make clear, the orthographies do not always present insuperable obstacles to the preparation of phonemic representations. The spelling conventions used by the principal recorders to record segments in word-initial position can usually be determined with tolerable accuracy, a matter explored in the subsections of Chapter 7 which discuss the various stops, nasals and other segments (§ 7.6 and following). At the same time it is also clear that most of the consonants and semi vowels articulated in medial or final position in word elements were members of sets of allophones, and that they should be treated as alternations of each other (e.g. § 7.6.8.1). In some other cases the lenition of consonants in final position led to their replacement by semi-vowels and vowels (e.g. § 7.8.1). The nature of the consonants which head following word elements can be even more enigmatic. In many words the evidence suggests that the segments were phonemic. But particularly when the evidence suggests that the consonant was the product of eclipsis followed by epenthetic alliteration in the form of perseverant assimilation, comparative data suggests that the consonant recorded was a member of a set of allophones (e.g. §§ 7.6.8 and 7.9). Examples which illustrate many of the points made with respect to eclipsis and alliteration can be viewed in the words for *nose* sublisted under <drow.wer.rid.de.yer> (*Wordlist*: 104).

With respect to vowels one must seriously question whether vowels were usually contrastive (cf. Crowley & Dixon 1981: 413), a matter which can not be resolved in this thesis. A principal purpose of phonemic representations is to distil differing transcriptions of recorded words into an acceptable form that it is believed closely approximates to the usual pronunciation of that word. When segments are allophones such a task becomes difficult, and in the case of most Palawa vowels probably impossible. If a serious risk of misleading readers is to be avoided, then in most cases a number of alternative phonetic interpretations would need to be provided. An important question therefore, is whether there is any point in devoting an immense and disproportionate amount of time to such an exercise, when so many other tasks need to be undertaken.

The preparation of phonemic representations can be assisted by a knowledge of the underlying morphology of a word, particularly when the word evidences reduplication. Such representations will also be aided by semantic analyses that determine the progenitor of cognate and other comparable words. But most exercises of this nature are beyond the scope of the present thesis.

§ 2.6 Reading the Thesis

Much of the material presented in this thesis will be unfamiliar to many readers. The same comment applies to a number of hypotheses advanced and discussed. In a body of material such as Chapter 7, only one point can be discussed at a time. Yet to understand a particular discussion, the reader may need to have some understanding and awareness of one or more other features of the Palawa languages which bear on the discussion, and which are not discussed until later. The object of this subsection is to draw attention to these features at an early stage.

Palawa exhibits a number of stressing and accenting patterns (§ 7.9). These patterns differ in a number of respects from the patterns typically exhibited by the Indo-European and Pama-Nyungan languages. The Palawa patterns are logical, and internally consistent. An understanding of the patterns will assist a reader to understand the transcription of most Palawa words as a series of monosyllabic word elements. In turn and as well, such an understanding can alert a reader to the loss in a word element of one or more segments. Thus almost invariably a word element in the form CVrŋ evidences the fact that the element as originally formed has been fully preserved, and as a corollary that the element was stressed. It links such a word element with elements in otherwise comparable words in which the element has been transcribed as CVr or CV. It is suggested that § 7.9 be read at an early stage, and before any attempt is made to study the tables of illustrations.

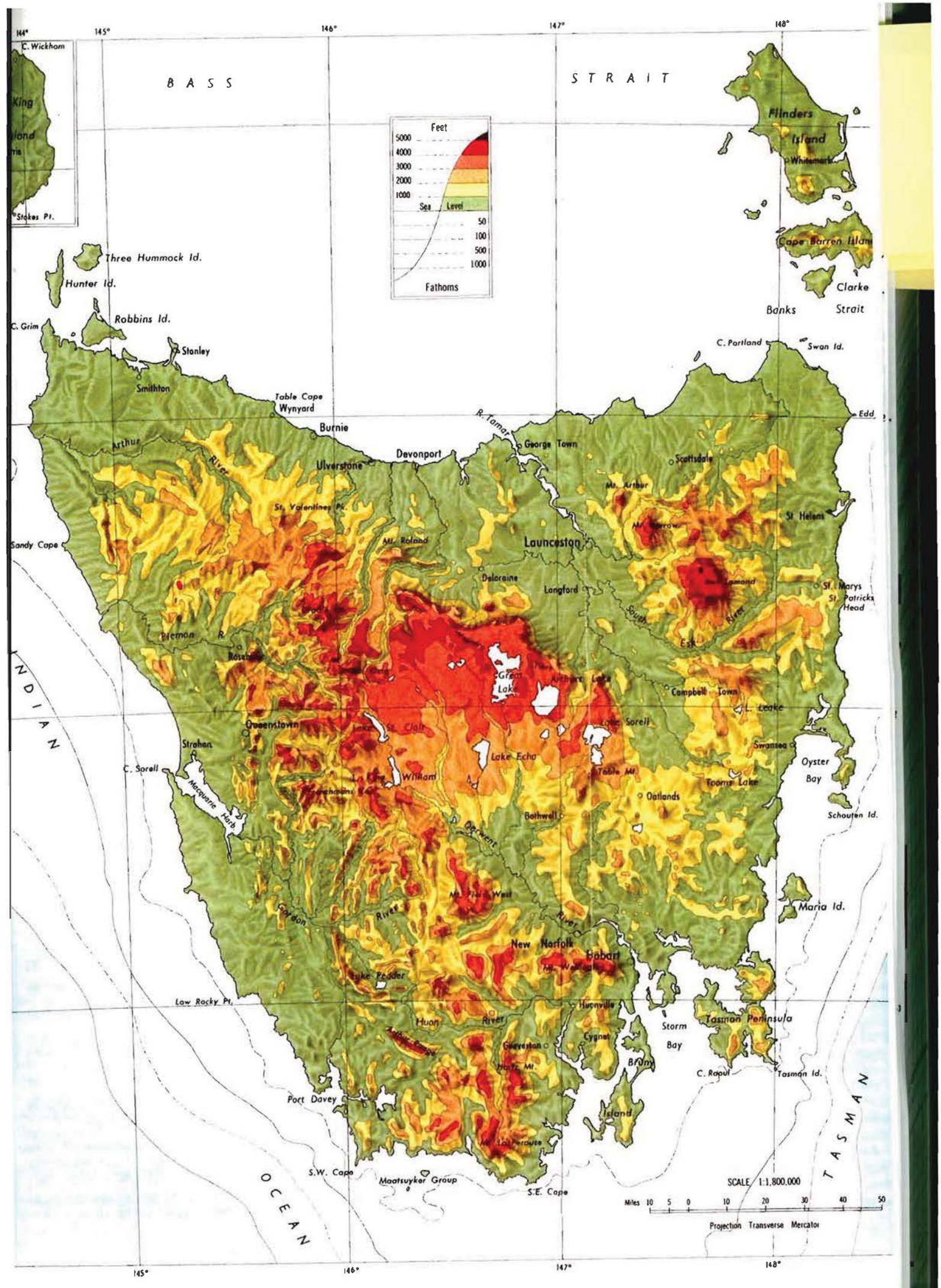
The phonological progression just referred to may seem trite. However, stressing led to the lenition of segments in medial and final position, as well as their eclipsis. The lenited forms fit into a limited number of patterns (§§ 7.6.1.1, 7.6.8.1 and 7.7.1). Recognition of these patterns provides information with respect to whether a particular transcription is an accurate identification of the segment ostensibly transcribed, or whether it is likely to have masked the articulation of some other segment. Irrespective of the accuracy of the transcription, it provides information with respect to the phonological progressions which have affected the development of a word. It is suggested that § 7.6.1.1 be read at an early stage.

The alliteration of segments as a result of anticipatory assimilation, and more particularly perseverant assimilation was a common phenomenon. Eclipsis follows a loss of stressing or accenting. Quite typically it affected segments in initial position in following word elements. In many cases this exposed a vowel as the initial segment. In other cases the lost segment was replaced by epenthetic alliteration. This involved the perseverant assimilation of the final segment

for the time being in the preceding word element. Again a limited number of patterns were involved. It is recommended that § 7.6.8.2 be read at an early stage. The subsection advances some unusual hypotheses, and may not be easy to understand on a first reading. But when understood, and provisionally accepted, it throws immense light on the pronunciation of Palawa segments, and an equally bright light on the phonological progressions involved in the development of Palawa words. Its validity becomes more obvious as one's familiarity with the Palawa lexicons grows. The number of patterns involved are more varied, and the particular segment preserved was often determined by semantic considerations. But hopefully the subsection will enable readers to accept more readily that words placed in the tables of illustrations are comparable for the purposes of the statements made by me within the context of the discussion that precedes the table.

Alliteration ostensibly led to the formation of geminate consonants (§ 7.6.6). It is not implausible to suggest that only a percentage of the numerous geminate consonants transcribed were in fact geminate consonants. In many cases their transcription more probably reflects the presence of a syllabic boundary, and the perseverant assimilation of a preceding segment; and in this context a vocal 'closure' or other hiatus. The salient points for present purposes is that the transcription of geminate consonants invariably evidences the boundary between two word elements, and as well eclipsis followed by epenthesis. In other words, transcriptions in the forms [**r.r**], [**w.w**], [**l.l**], [**t.t**], [d.d] etc. evidence an ancestral tapped rhotic, and often for interpretative purposes cognate words.

It is clear that palatalisation and labiovelarization affected the development of Palawa words, and probably continued to affect their articulation in the Holoçene (§ 7.6.7). Transcriptions in the forms <**qu**> and <**kw**> are readily recognisable. Most transcriptions in the form Cy(V) evidence palatalisation, and the important point to be kept in mind is that<y> never transcribes /ai/. Not so easily recognisable, and much more ambiguous, are those transcriptions in which the recorder has transcribed a vowel cluster after what is ostensibly a bilabial or dorso-velar stop. The second vowel in these transcriptions may be a lenited form of a rhotic or a dorso-velar nasal. The least obvious are consonant clusters in initial position in the forms [**pr**], [**pl**], [**cr**], [**cl**] etc. in which as a result of the usually ancient dissimilation of a labiovelarised stop, the original segment has been converted into a consonant cluster, and a rhotic or lateral has replaced the glide. However, the interpretation of Palawa words will be aided if one is alert to these shifts in pronunciation.


144°
145°
146°
147°
148°
C. Wickham
King Island
Stokes Pt.
BASS STRAIT
Feet
5000
4000
3000
2000
1000
Sea Level
50
100
500
1000
Fathoms
Flinders Island
Whitemark
Cape Barren Island
Clarke
Banks Strait
Three Hummock Id.
Hunter Id.
Robbins Id.
C. Grim
Stanley
Smithton
Table Cape
Wynyard
Burnie
Arthur River
Ulverstone
Devonport
R. Tamar
George Town
C. Portland
Swan Id.
Edd
Scottsdale
Mt. Arthur
St. Valentines Pk.
Mt. Roland
Launceston
St Helens
Sandy Cape
Deloraine
Longford
St. Marys
St. Patricks Head
South Esk River
Forth
Preman R.
Rosebery
Green Lake
Arthurs Lake
Campbell Town
L. Leake
Queenstown
Lake St. Clair
Lake Sorell
Swansea
Strahan
Lake Echo
Table Mt.
Oyster Bay
C. Sorell
Macquarie Harb.
Lake St. Clair
Tooms Lake
Oatlands
Bothwell
Schouten Id.
Derwent
Mt. Field West
Maria Id.
Gordon River
New Norfolk
Hobart
Mt. Wellington
Tyke Peaker
Low Rocky Pt.
Huonville
Huon River
Storm Bay
Tasman Peninsula
Arthur Range
Cygnet
Geeveston
Mt. Fc. Mt.
Bruny Island
C. Raoul
Tasman Id.
Port Davey
Mt. Weld Perouse
S.W. Cape
Maatsuyker Group
S.E. Cape
INDIAN OCEAN
TASMAN
SCALE 1:1,800,000
Miles 10 5 0 10 20 30 40 50
Projection Transverse Mercator

Finally on matters of this nature, one should be alert to the fact that transcriptions of <h> only rarely record a glottal [h]. § 7.6.5 summarises the various ways in which these transcriptions are to be interpreted.

§ 2.7 Palawa Consonants and Semi-vowels

The range of Palawa consonants is set forth in Table 2.7. Segments followed by question marks indicate that the presence of the segment is suspected, but not established. Technical difficulties have prevented the use of a number of conventional phonetic symbols. Accordingly, in the case of a number of consonants digraphs have been used. To provide complete clarity the second symbol in each digraph has been placed in superscript. In the case of rhotics, the symbol for the approximant was not available, and [ř] has been used in its place. Tapped rhotics are transcribed as [r^r]. Technical difficulties have also prevented the reproduction of the diacritic used by Robinson and others in transcriptions of <y> as a part of a palatised segment, and/or as a segment of less than one mora in length. The transcriptions have therefore been reproduced as <ŷ>.

Table 2.7

	Dorso-velar	*Lamino-dental*	*Apico & Post-alveolar*	*Palato-alveolar*	*Bilabial*	*Labio-dental*
Stops						
(voiced)	[g]	[d^h]	[d]		[b]	
(unvoiced)	[k]	[t^h]	[t]		[p]	
(palatised)						
(voiced)	[g^y]		[d^y]		[b^y]	
(unvoiced)	[k^y]		[t^y]		[p^y]	
(labiovelarised)						
(voiced)	[g^w]				[b^w]	
(unvoiced)	[k^w]				[p^w]	
(retroflexed)			[rd^h]			
Nasals	[ŋ]	[n^h] (?)	[n]		[m]	
(palatised)	[n^y]				[m^y]	
(retroflexed)	[rn]				[rm]	
Rhotics						
(tapped)	[r^r]					
(approximant)	[ř]					
(palatised)	[r^y] (?)					
Laterals	[l]					
(dark)	[ɬ] ?					

Table 2.7 continues

	Dorso-velar	*Lamino-dental*	*Apico & Post-alveolar*	*Palato-alveolar*	*Bilabial*	*Labio-dental*
(palatised)						
(voiced)	[ʎ] ?					
(unvoiced)	[l^y]					
(retroflexed)	[rl]					
Fricatives						
(voiced)			[d^r]	[d^j]		[v]
(unvoiced)			[t^r]	[t^j]		
Semi vowels			[j]		[w]	

Chapter 3: Tasmania as a Geophysical Entity

§ 3.1 Geophysical Descriptions

§ 3.1.1 Geology –The Tasmanian Land Mass

Today Tasmania is a mostly mountainous island, separated from the Australian mainland to its north by Bass Strait, a 250 kilometre wide body of water. Triangular in shape, its area including offshore archipelagos comprises some 26,383 square miles. It is thus less than one third of the size of the State of Victoria, and just a little smaller than both Sri Lanka and Ireland (Davies 1965: 1).

In geological terms the Tasmanian land mass is a southern extension of the eastern Australian highlands. Its separation from the eastern highlands some 65 million years ago resulted from a rifting process which created two tectonic plates out of a larger plate which once embraced both Australia and Antarctica. Bass Strait now fills the lower depths of a rift valley created as part of the total process. The creation of the rift valley was accompanied by volcanism which created two chains of volcanic extrusions, and left a large relatively level basin in between. One of these, a western chain, runs SSE from Cape Otway in Victoria through King Island to Cape Grim. An eastern chain runs SSE through Wilsons Promontary to the Furneaux Group and on to the Cape Portland peninsula.

The features to be referred to in this paragraph are shown in map 5 in the *Atlas of Tasmania* (Davies 1965: 5) a copy of which faces the opening page of this chapter. Practically the whole of the present western coast line is a relatively wide coastal plain. The continental shelf to the west of the present shore line slopes gently towards the edge of the shelf, and as indicted by the map, is relatively narrow, usually varying between 20 and 30 kilometres in width. This means that from a human perspective there has been little change in the nature and configuration of the shore line throughout human prehistory. Open bays such as Ann Bay and Ocean Beach were open bays in 40,000 BCE, on the advent of the Holocene in 11,000 BCE, and today, albeit in the Pleistocene somewhere further west. From the Arthur River in north western Tasmania, extensive and formidable ranges of high and rugged mountains run SSE parallel with the plain for almost the whole length of Tasmania, and terminate at South East Cape on the central southern Tasmanian coast. In southern Tasmania the ranges are pierced by two graben,

one of which forms the valley of the Derwent River, and the other the valley of the Huon River. To the east of the ranges in central Tasmania, lies the Central Plateau, at all times during human prehistory a large, high, and open alpine region. To the north its escarpments overlook a region of steep hills which in height progressively drop away to the present coast line. To the east the escarpments overlook the Northern Midlands, another much wider graben. This graben separates the Central Plateau from the north eastern highlands and the eastern ranges, together two much smaller versions of the western ranges. The two eastern regions are separated from each other by a small graben (the Fingal Valley). To the south east of the Central Plateau a large region (the Southern Midlands) extends to the eastern ranges. This region is comprised of ranges of low, worn-down hills, interspersed with relatively wide shallow riverine valleys. The eastern coastal plain is narrow, and at times non-existent. The eastern continental shelf is also relatively narrow. From Freycinet Peninsula to South Cape the coastline has today a number of fiords, peninsulas, and offshore islands, features which were progressively created by rising seas from 15,000 BCE onwards until sea levels stabilised c6,000 BCE (Sim 2004). South of South Cape and the Tasman Peninsula the continental shelf extends several hundreds of kilometres to the south.

In climatic terms south western Tasmania experiences subantarctic conditions, and in winter the mountainous regions have heavy snow cover. The Central Plateau and the eastern ranges excepted, the other mountain regions also have snow cover during much of the winter and early spring. In the Pleistocene conditions were colder, and yet more forbidding. In human terms these regions were uninhabitable by Palaeolithic hunters and food gatherers during the colder months (Ranson: pers.com.), an opinion which would be readily endorsed by bushwalkers, graziers and other present day Tasmanians who have visited these regions. In terms of human contact, both the western ranges, and during the Holocene, the dense forests of northern and southern Tasmania placed significant barriers between the Aboriginal populations of western Tasmania, and those of central and eastern Tasmania.

§ 3.1.2 Geology – The Bassian Desert

Very few descriptions of the rift valley as a geological feature have been published. Blom (1988) has published a useful article which in terms of the changing sea levels of the late Pleistocene (post 60,000 BCE) traces the successive sea invasions of the valley from the

west, and its successive retreats. His chart of the valley floor enables these advances and retreats to be mapped in terms of chronological time. It thus establishes the blocking of a direct littoral route from the Mount Gambier-Warrnambool region to far north western Tasmania by 14,000 BCE, and ultimately of all routes through the rift valley by the formation of Bass Strait c10,500 BCE. Today the lowest section of the valley is some 80 metres below sea level. The present, at times quite wide coastal plains of northern Tasmania were once the southern fringe of the valley.

Some other more general references (e.g. Plimer 2000) describe the nature of the valley during the late Pleistocene. It was at all relevant times until flooded, an extremely arid, usually extremely cold desert of shifting sand dunes. Geologists euphemistically named the valley the 'Bassian Plains'. In the thesis it will be referred to as 'the Desert' or as the 'Bassian Desert'. During each of the last two glacials the Desert was merely the southernmost extension of a desert which extended from Shark Bay in Western Australia, through South Australia and most of Victoria to the Tasmanian land mass (Oppenheimer 2004: 246). As noted earlier, ridges created by volcanic extrusions had effectively created a large basin. At its lowest level there was, until no later than 14,000 BCE, a saline lake rather similar to Lake Eyre today. From time to time, depending on climatic conditions, the Bassian Lake was replenished by streams such as the Yarra and Hopkins from the north, and more frequently and more plentifully from the south by Tasmanian streams, principally: the Tomahawk; the Great Forester; Pipers; the Tamar; the Forth; the Mersey; the Leven; the Emu; the Cam; the Inglis, and the Detention and Black Rivers.

§ 3.1.3 Geology –The Oases

The landmass which today manifests itself as King Island was during the late Pleistocene (post 60,000 BCE), an oasis which supported a macro fauna and a diverse flora. From such time as it was reached by humans, it supported an Aboriginal population until that population left the island c9,400 BCE (Sim 1999). Thereafter it remained uninhabited until the end of the 18th century when it was occupied by Europeans engaged in the sealing industry. The island is in the path of the Roaring Forties, a perennial moisture-bearing wind. As a result even during the last two glacials it always received some precipitation. The island is equidistant from the Australian mainland and Tasmania, in each case a distance of some 70 kilometres, a distance which has at all times been beyond

the reach of any watercraft ever constructed by either the Aborigines of southern Australia, or the Tasmanian Aborigines.

Similar comments apply to the landmass which today manifests itself as Flinders Island and the Furneaux Group. Some part of its human population remained on the landmass after it was severed from the Tasmanian mainland (Sim 1999). The archaeological evidence suggests that its Aboriginal population died out c4,000 BCE. The Roaring Forties would have provided less precipitation, but precipitation would have resulted from winds off the Tasman Sea to the east. By sea the Furneaux Group is today some 35 kilometres north of Tasmania, a distance also beyond the reach of Tasmanian sea craft. When connected to Tasmania, the width of the Desert would have varied, and during the glacials would have been up to 75 kilometres wide.

A third oasis, more technically referred to as a 'refuge', was provided by the Murray River and its valley. During the glacials this refuge enabled humans to survive in the regions traversed by the river and its major tributaries, and thus to penetrate the late Pleistocene deserts whether upstream from the sea, or downstream from the Great Dividing Range. The Great Dividing Range and its adjacent sea coast provided another tongue of inhabitable land which extended into Victoria from the north.

§ 3.2 Late Pleistocene Changes

The human prehistory of Australia probably dates from c65,000 BCE (§ 4.1), and thus spans the end of the Pleistocene Epoch, and the whole of the Holocene as the present epoch. From c100,000 BCE onwards the world has experienced several ice ages ('glacials'). What will be referred to as the second last glacial had a number of peaks during the period which has ensued since Modern Man emerged from Africa. The first of these extended from c85,000 BCE and ended c82,000 BCE: the second extended from c73,000 BCE to c63,000 BCE: and the third from c53,000 BCE to c50,000 BCE (Oppenheimer 2004: 79 and following). The last glacial set in c30,000 BCE, reached its maximum c18,000 BCE, and ended c11,000 BCE (Oppenheimer 2004: 79 and following; Plimer 2001: 172; Cosgrove 1997). As a result the climate in south eastern Australia, and in Tasmania and the Bassian Desert in particular, has for lengthy periods been very arid and extremely cold. During the glacials Tasmania was subjected to extensive glaciation. The second last glacial was severe enough to obliterate Tasmania's mega fauna. By

c70,000 BCE the vegetation of the Tasmanian land mass and the oases, but probably not the Desert, was again supporting macropods and other large fauna, and thus potentially would have been able to support a human population.

The whole of the Holocene has been a wetter, warmer period referred to by climatologists as an interglacial. An earlier interglacial provided south eastern Australia with a more benign climate for several millennia between c50,000 BCE and c30,000 BCE, as did an interstadial from c15,000 BCE to 13,000 BCE. One result of both the interglacial and interstadial was the partial inundation of the Desert from the Indian Ocean east, but the inundations never completely severed land connections with Victoria until the Holocene (Blom 1988; Chappell 1991). During most of the late Pleistocene King Island was part of this 'land bridge'. From c49,000 BCE to c43,000 BCE it was separated from the Australian mainland, but not from Tasmania, by a wide marine gulf. It was again so separated from c41,000 BCE to c37,000 BCE, and again during the last glacial for a short period from c29,000 BCE. However, the embayments were never so large as to prevent traversal of the Bassian Desert by a route along its western shore line. At all relevant times until the formation of Bass Strait, the Furneaux Group has been part of the 'land bridge'. The 'land bridge' at its widest extended from Cape Otway in western Victoria to the Seal Islands east of Wilsons Promontory. At other times it was much narrower, and little more than 100 kilometres wide (Chappell 1991). Until the formation of Bass Strait the eastern sill or ridge at all times remained dry land (Blom 1988). Wilsons Promontory in the north, the Hogan Group, the Kent Group, and the Furneaux Group in Bass Strait, and the Cape Portland peninsula in the south, mark the line of the ridge.

At all relevant times until 15,000 BCE conditions in Tasmania and the Desert remained much colder and much more arid than during the Holocene (Plimer 2000; Roberts 1998: 68). The complete lack of evidence of human habitation of the Tasmanian land mass, and of the oases before 37,000 BCE, suggests that until c40,000 BCE at least, the Desert constituted an impassable barrier to human migration. This is consistent with the fact that elsewhere in the world deserts constituted similarly effective barriers (Oppenheimer 2004). With the onset of the last glacial the climate again became extremely cold and arid. Corroborative evidence for the last glacial and its advent and peaking is provided in Tasmania by excavations in the Kutikina Cave and other caves in south western and central Tasmania (Kiernan, Jones & Ranson 1988: 66). This last glacial peaked c18,000 BP (Plimer 2001: 80). Falling sea levels again widened the land connection, expanding

the Desert to its full width. For the Palawa as hunters and food gatherers climatic conditions became extremely hostile. Whilst during much of this era the western half of Tasmania may have been relatively free of ice and permanent snow, much of eastern Tasmania was probably glaciated (Cosgrove 1995). In any event it was probably a very arid area which supported a reduced biomass, and in human terms provided poor sustenance for hunters and food gatherers (Cosgrove 1997). The Desert, including what are now the coastal plains of northern Tasmania and western Victoria, would have provided an even more hostile environment characterised by aridity, high winds, and shifting sand dunes (Plimer 2001: 174). Rivers flowing into the Desert had much reduced flows (Blom 1988). The Bassian Lake was saline, and like Lake Eyre today had no outlet to the sea. With respect to human inhabitation of the Desert (if any), archaeologists and others make the point that its inundation has obliterated such archaeological evidence as may once have existed. The evidence thus suggests that human occupation of the Desert was at all times opportunistic, and in small numbers. The apparent failure of humans to traverse the Desert before 37,000 BCE suggests that its traversal again became impossible during the last glacial, a surmise accepted by Oppenheimer and his colleagues (2004: ch. 6). Linguistic support for the surmise must await an in-depth analysis of the Palawa lexicons, and etymological analysis of the place names of Victoria and Tasmania (§ 1.1).

The retreat of the last glacial was relatively rapid (Roberts 1998: 68 and following; Plimer 2001: 174). During the interstadial summer temperatures were at times higher than those of today. Conditions were also wetter than during the glacial. The Bassian Lake increased in size and eventually overflowed to form a river which flowed west to join the Indian Ocean to the north west of the King Island oasis. Ranson believes that the shores of the Lake, riverine regions created by the streams feeding it, and to a lesser extent the Desert as such became increasingly capable of supporting macropods and other large fauna and thus human populations (pers.com.2002). His views are not implausible. It is surmised by Ranson that the Lake and the Desert ultimately constituted a winter base from which the Palawa proceeded to forage over the Tasmanian land mass in warmer months, its foraging facilitated by the then open nature of the Tasmanian terrain. This surmise is less plausible, but its further assessment depends on an etymological interpretation of the Palawa place names. The interstadial was followed by a stadial which lasted until the advent of the Holocene 11,500 BCE (Roberts 1998: 68).

During the last 50,000 years of the Pleistocene some remnant forests subsisted in parts of western Tasmania, but the greater part of the land mass comprised moorlands, marshes, and large areas of surface rock. Trees, when present, tended to be confined to small forests in western Tasmania, and elsewhere copses in sheltered areas with suitable soils (§ 3.2). In and near glaciated areas the moorlands and marshes provided poor feeding for macropods and other large fauna, and accordingly poor sustenance for human populations. Eastern Tasmania lay in a rain shadow created by the western ranges and the Central Plateau. As a result Cosgrove infers (1997: 50) that it was an arid region with a low biomass, and accordingly only a small human population.

Unless otherwise noted most of the material provided in this subsection is consistent with models proposed by Bowler (1976). In the absence of recently published material with specific reference to Tasmania and the Desert, it has been supplemented by oral and other information provided by Sim (2,000 and 2004) and Ranson (pers.com. 2002).

§ 3.3 Holocene Changes

As noted earlier, the Bassian Desert was never completely inundated. With few interruptions its southern fringe still stretches from the Indian Ocean across northern Tasmania to the Tasman Sea. The Hunter Group and the other offshore islands of north western Tasmania are remnant areas. The major interruptions comprise the region from Rocky Cape to the Inglis River, and the region from Cooee west of Burnie to the western bank of the Mersey River. A minor interruption is the extrusion of the Asbestos Range west of the Tamar River into Bass Strait. As noted earlier, a usually wide coastal plain extends south from Cape Grim almost to Port Davey.

During the interglacial the greater part of the Tasmanian terrain was open and alpine in character. There were large regions of moors, sedges, and heaths. From 14,000 BCE onwards reafforestation of the Tasmanian land mass had commenced (Cosgrove, Allen & Marshall 1988: 238). With the advent of the Holocene, the pace quickened. The higher mountain summits, the Central Plateau, other present day alpine regions of Tasmania, and windy and/or salt affected coastal areas excepted, by 9,500 BCE practically the whole of the land mass was covered by rainforest and wet sclerophyll forest. In human terms the change in vegetation can be viewed as an ecological disaster. But overall the warmer

moister conditions may have actually increased the total biomass of the Tasmanian land mass and its littorals to provide greater sustenance for hunting and food gathering populations (Ranson 2002 pers.comm..). The wet forests prevailed until c5,000 BCE in most of inland Tasmania including the Northern Midlands and the eastern ranges, and until a millennium later in the Southern Midlands. A more arid phase then weakened the hold of the wet forests, and perhaps aided by firestick farming much of the catchment of the Derwent River, the Northern and Southern Midlands, the Fingal Valley, the Tamar Valley and other similar inland areas were converted into the open woodlands observed and quickly appropriated by the British settlers early in the nineteenth century. Even in the more mountainous regions areas of open country were created or enlarged (Sagona 1994: 43-45). Afforestation permanently removed the greater part of the western ranges as a suitable habitat for humans (Kiernan, Jones & Ranson 1988: 61), and also much of the western coastal plain. One exception was the Lake Pedder basin, other regions of high moor land in the south west, and a number of wide valleys which leading off the Central Plateau, pierce the western ranges from the east. Whilst these open areas may have been from time to time traversed and/or foraged, it has been suggested by Ranson (2002 pers.comm.) that the alpine conditions in these regions precluded year-round occupation. His suggestion is plausible in that the regions are often snow-covered for lengthy periods, provide little shelter in the form of deep caves, and there is no evidence that the Palawa ever manufactured suitable close fitting clothing. Afforestation also permanently removed much of north western and northern Tasmania from human habitation. However, in these regions the climate was more benign. Open plateaus and plains were linked by tracks and as a result exploited and enlarged. Similar comments apply to the eastern ranges, and the Tasman and Forestier Peninsulas. The Central Plateau remained open ground. Whilst uninhabitable in the colder months (Ranson 2002 pers.comm.), the region provided foraging opportunities in the warmer months (Ranson – pers.com 2002; Plomley 1991). In north eastern Tasmania the Desert was converted into grassy plains, praised by Robinson as some of the best grasslands he had seen in Tasmania (Plomley 1966: 285).

Chapter 4: The Aboriginal Occupation of Tasmania

The current model accepted by historians to explain the Aboriginal settlement of Tasmania is an overly simple one. It has been surmised by geologists ever since the early years of the twentieth century, that the first Palawa arrived at a time when Tasmania was a plateau connected to mainland Australia by a region of dry land (Johnson and others 1900-1910). That in human terms that region was during the greater part of Tasmania's prehistory, an inhospitable desert, seems not to have been appreciated by either historians or philologists, and is rarely if ever adverted to in their publications. That there were immense variations in the width of the desert is a matter discussed by archaeologists and geologists, but if mentioned by historians is never explored by them in terms of its reasons, nor in terms of its consequences for Palaeolithic hunters, fishers, and food gatherers. It seems to have been further assumed that as a 'land bridge', this immensely hostile desert was at all times traversable by humans, until Bass Strait became a wide and permanent stretch of water.

However, such a model does not explain why the Tasmanian land mass was not occupied until twenty or more millennia after human occupation of contiguous regions of the Australian mainland. Nor does it acknowledge the existence of the last glacial, and whilst it lasted its probable effect on the ability of human populations to traverse the Desert; nor whether occupation of any part of the Desert or its oases by populations in place both before the advent of the last glacial and after it waned, would have operated as a barrier against the intrusion of further populations. Little or no consideration has been given to, nor search made for, archaeological and other ethnographic, nor for linguistic evidence which might reveal whether later immigrants brought with them new languages, new technologies, and/or new socio-economic groupings.

It seems clear that recent advances in archaeological knowledge and a better understanding of climate changes in southern Australia during the last 100,000 years require a new and more sophisticated model. More recently, and since work on this thesis commenced, our understanding of this period during human prehistory has been dramatically expanded and substantially modified by the work of geneticists such as Stephen Oppenheimer (2004). In general terms the emergence of Modern Man from Africa c 83,000 BCE involved a few small bands of humans, a matter established by the DNA of their descendants in Asia, Europe, and elsewhere outside Africa. A major

consequence was the ultimate eradication of all other types of man worldwide, including Neanderthal Man, Java Man, Peking Man, and Florenses Man. The subsequent mutations of human microchondial DNA (in the female line), and Y-chromosomes (in the male line), can be assigned relative chronologies, and in combination with our modern knowledge of climate changes, changes in sea levels, and the like, used to now date the expansion of modern man, and in particular his occupation of Australia. In terms of Tasmanian prehistory, the importance of deserts as barriers, and of large rivers such as the Murray as refuges for humans during glacials, has assumed a critical importance it has never had hitherto. A new model will be needed to explain human migrations to Tasmania from c40,000 BCE onwards until the formation of Bass Strait, and also population movements within Tasmania until halted by British settlement. It is one of the aims of this chapter to propose such a model. However, any exposition of the supporting linguistic evidence is beyond the scope of this thesis.

§ 4.1 The Aboriginal Colonisation of the Australian Mainland.

Discussion of this topic, like the archaeology of Tasmania is bedevilled by a lack of publication of recent work in the field. When I commenced writing this thesis, published works indicated general acceptance of a proposition that humans first arrived in Australia not less than 35,000 years ago (Smith 1998: 41). However, a little less than a decade ago a date close to 60,000 BCE had been accepted by many archaeologists as very plausible (Murray 1998: 11). Many dates are again under review as the result of new developments in dating techniques (Allen 1998(2); Roberts, Jones & Smith 1998). Dates in excess of 100,000 BCE have been mooted (cf. Plimer 2000: 172). The implications of the 'man out of Africa' theory have received increasing acceptance in the academic world. So far as I am aware there is no archaeological evidence for the occupation of Australia by *homo helmei* (the humans who in Europe and Asia preceded *homo sapiens sapiens* – 'man out of Africa). If this is so, and if the views of the geneticists are proved to be correct, this places human settlement of Australia at c65,000 BCE (Oppenheimer 2004: ch.4). Over the following millennia a succession of migrations from outside Australia undoubtedly occurred (Murray 1998: 13-114; Plimer 2000: 172). Presently little is known as to the impact of these migrations on the formation and development of the modern Australian Aboriginal languages (cf. Dixon 1980: ch.7). But the salient point is that if humans were living in south eastern Australia some twenty-five millennia before 37,000 BCE, what apart from the Bassian Desert until then prevented their arrival in Tasmania?

§ 4.2 The Aboriginal Colonisation of the Tasmanian Land Mass

Both archaeological evidence and ethnographic evidence confirms that the first Tasmanians were Australian Aborigines in racial type (Ryan 1981: ch.1). That evidence is consistent with DNA evidence provided by a recent worldwide survey of human haplotypes that included as well as those of the mainland Aborigines, descendants of the Palawa (Van Holst Pellikaan 2006). There were some superficial physical differences (Roth 1899: ch.2). The differences are currently explained by genetic drift (Ryan 1981: 10). Without discounting genetic drift as a factor (Oppenheimer 2004: passim), it is to be noted that if the first Tasmanians comprised a single band, or else a small number of closely related bands, this in itself provides a sufficient explanation for the differences between the Palawa and mainland Aborigines. Discarded theories of a relationship between the Palawa and populations today living in the Andaman and Nicobar Islands, and central Malaya, have again become relevant (Oppenheimer 2004: passim). But there is no reason to assume that there was only one migration, and if there were a number of migrations genetic drift as a factor becomes less relevant.

Until recently, published works suggested that humans reached the Tasmanian land mass not later than 30,000 BCE (Allen 1998(1): 55). As noted, more recent work by archaeologists have established a human presence in Tasmania by 37,000 BCE (Cosgrove 1995; 42: Sim 2000: 11). There is no evidence that any of the late Pleistocene populations of Australia possessed seagoing craft capable of bypassing the Desert. Similar comments apply to any possibility that Bass Strait may have been traversed by later migrants during the Holocene. Large canoe-shaped catamaran-style boats with pointed ends comprising three rolls of bark or reeds were developed over the last 2,000 years, and smaller versions may have first been used about 3,000 years ago (Ryan 1981: 9). They could not be used in rough seas, adverse winds, or because of water logging over great distances. A fuller description of these boats is provided in § 5.1. The long delay in the first human crossing of the Desert thus involved the use of the Desert as a 'land bridge'. It is suggested that there were a number of factors which combined to cause the delay, factors which now should be given great credence as a result of a new appraisal of the relevance of climatic factors by the geneticists (Oppenheimer 2004), and by geologists (Plimer 2000).

The cold temperatures and arid nature of the Desert, combined with their great width, placed a formidable barrier in the way of hunter food gatherers. That barrier would have

been all the more formidable by reason of the fact that as a region of shifting sand dunes the Desert would have provided little potable water and very little sustenance (§ 3.2). From c40,000 BCE to c30,000 BCE wetter conditions prevailed, and presumably this enabled human traversal of the Desert (§ 3.2). The route taken by the band (or bands) has not been established by archaeologists, but hypothetically wetter conditions may have opened up three routes. During the last ten millennia of the interglacial the Roaring Forties would have carried and deposited more moisture than they did before 40,000 BCE, and later again between 30,000 BCE and 15,000 BCE. Accordingly several succeeding seasons of higher than usual rainfall and warmer weather may have opened a route along the western shores of the Desert. Whilst the prevailing winds would have deposited much less moisture on the interior and eastern side of the Desert, the higher ridge of ground along its eastern shore would have produced some precipitation. That precipitation would have been supplemented by rainfall from easterly winds coming off the Tasman Sea. En route in the case of the littorals was the refuge provided for humans by the Murray River, and the oases provided by the King Island and Furneaux Group land masses (§ 3.1.3). A third route lay through the centre of the Desert. The higher rainfalls (§ 3.2) would at times, and particularly after 40,000 BCE, have augmented the rivers entering the Desert from Victoria and Tasmania (§ 3.1.2). This may have enabled bands to descend the Victorian rivers, circumventand/or sojourn around the Bassian Lake; then ascend one or more of the Tasmanian rivers (cf. Ranson § 3.2). In fact the early place-names virtually establish that Tasmania's discoverers used he western littoral as their route. See later.

Once the first immigrants arrived the open nature of the Tasmanian terrain permitted relatively rapid exploration and exploitation of the whole of the Tasmanian land mass (§ 3.2). The ability of later migrants to occupy and exploit the Tasmanian terrain would have been more restricted. Presumably the existing Pleistocene populations would have offered a measure of resistance. An ice age quarantined Tasmania for fifteen millennia from 30,000 BCE onwards. From 14,000 BCE onwards the advancing spread of wet forests restricted habitat choices (Kiernan, Jones & Ranson 1988: passim; Cosgrove, Allen & Marshall 1988: 238; Cosgrove 1997).

§ 4.3 Later Migrations from the Australian Mainland

If climatic conditions permitted traversal of the Desert c37,000 BCE, then there is no known reason why further migrants should not have continued to arrive until the advent of the last glacial in 30,000 BCE (§ 3.2). It is unlikely that archaeological evidence will ever establish that there were any such migrations, or if there were, the route or routes followed. The inundation of most of the Desert has obliterated the relevant archaeological evidence. There is no reported mainland or Palawa evidence of any changes in technologies, mythologies, or socio-economic organisation. There is no published evidence of linguistic developments which might have served to distinguish populations in place from later migrants. My own unpublished work has not revealed any unequivocal evidence of any such developments or changes. If, as suspected, the pace of change during these millennia was slow, such changes as did occur are unlikely to be identifiable.

It is also plausible to assume that if any migrations did take place during the last glacial, they would have been few, and that there would have had little impact on the culture and languages of populations on either side of the Desert. Archaeologists believe that Aborigines were occupying the Furneaux Group oasis by 20,000 BCE (Sim 2005: pers enq.), but whether they had migrated north from north eastern Tasmania, or south from either central or eastern Victoria, is unknown.

The interstadial which followed the end of the last glacial, and in due course the Holocene, ushered in new and much more favourable climatic conditions (§ 3.2). The vastly improved climatic conditions would have facilitated penetration of the Desert, and in consequence the use of all three routes. Whilst the stadial which followed may have stemmed the flow of migrants, it may not have completely terminated the migrations as ultimately did the formation of Bass Strait. There is ethnographic evidence that later migrations did occur. It will be appreciated that references to dates for these later migration, such as 15,000 BCE, 13,000 BCE etc. in descriptions of this evidence, are to some extent arbitrary. The dates are based on inferences formed from twentieth century knowledge of the changing climatic conditions during the late Pleistocene and the Holocene, and not the dating of archaeological materials.

§ 4.3.1 Differences in Physique

The colonists did not regard the Tasmanian populations as completely homogeneous. For what it is worth, the difference in the physique of Aborigines living in 'western and southern' Tasmania (i.e. south of the Channel District) and 'northern and eastern' Tasmania from those living elsewhere was a matter of considerable comment by James Kelly, George Augustus Robinson and others (Kelly – Evidence given to the Aboriginal Committee – c1830; Ling Roth 1899:165-171, James Backhouse Walker 1902: 249, Plomley 1966: passim). The former were tall with a number of individuals exceeding 6 feet in height, and 'stout' i.e. with a good body physique. The latter were on average shorter than the nineteenth-century colonists, that is shorter than an average 5'6" in the case of males, and 'correspondingly' shorter (5'2") in the case of females (Nicholas 1988: 78-82). As stated earlier (§ 4.1), it is believed that over time there have been a number of migrations into Australia. In other words migrants arriving post 15,000 BCE may have provided fresh DNA, and contributed to the creation of a more robust type. Intriguingly in 2002 some microchondrial DNA testing of Tasmania's Aboriginal population was undertaken, but further testing and publication of the results would appear to have been thwarted by Palawa politics and sensitivities. To date I have been unable to obtain access to the results.

§ 4.3.2 Stone Artefacts

It might be thought that differences in the forms of stone artefacts found at habitation sites would provide evidence of migrations both to, and within, Tasmania. Thus Jones has claimed that the stone artefacts found in the Rocky Cape caves are of the same type as stone artefacts of similar age found in Victorian habitation sites (1971). The earliest habitation level at the Rocky Cape caves has been dated at c8,000 BCE. Both the date and the tool assemblage is consistent with a proposed date for the arrival of a population from the Mt.Gambier-Warrnambool region of mainland Australia (§ 4.3.3; Jones 1966). But it is a vexed question amongst archaeologists as to how much one can read into variations between the shapes of knapped stone implements. The force of Jones's observations with respect to the stone artefacts at Rocky Cape is weakened by his similar observations with respect to stone artefacts dating from the preceding glacial found in the Kutikina Cave (Kiernan, Jones & Ranson 1988: 68). Furthermore the observations of Kiernan, Jones and Ranson with respect to stone artefacts at the Kutikina Cave are in

effect contradicted by Cosgrove, Allen and Marshall (1988: 248) who believe that the Kutikina stone artefacts evidence distinct and divergent developments in the manufacture of stone artefacts by the Pleistocene populations of south western and southern Tasmania. Similar unresolved arguments abound in archaeological publications world-wide. I do not propose to engage in debates which are so far outside my own field of competence.

§ 4.3.3 'Karake" Rock Engravings

In contrast the geometric rock engravings of north western Tasmania provide strong evidence of a connection between the early Holocene inhabitants of north western Tasmania, and immigrants from the Mount Gambier-Warrnambool region. The Tasmanian petroglyphs are all located as coastal sites, in some cases now marginally below the high tide mark. In other words their creation probably dates back to a time which post dates the advent of the Holocene, but which predates the ultimate stabilisation of sea levels c6,000 BCE. Unfortunately the engravings have as yet not been dated. The fact that they are confined to some 15 kilometres of coastline from Mount Preminghana to a little south of Sundown Point points to one or more bands with an artistic and/or mythological tradition that after its arrival in Tasmania did not spread widely, and which ultimately, perhaps relatively quickly, was lost. Sketches, photographs and written descriptions published by Josephine Flood (1990: 32-34; 204-207; and 337-343) indicate a close resemblance between the engravings and the 'Karake' style engravings in several Mount Gambier caves. If in turn these are related to the Olary engravings (pp.32-33) the style has a Pleistocene heritage which dates back some 30,000 years. The engravings have no counterparts elsewhere in mainland Australia; nor in Tasmania. They thus strongly evidence the arrival of a population who had penetrated the Desert from the north west, and who ultimately reached north western Tasmania. For the sake of completeness there are some superficially similar but more crudely and irregularly shaped circles on igneous rock surfaces atop Mersey Bluff (p.334). The circles are not accompanied by other geometric formations, and may be natural formations;.

Perhaps significantly no pictographs have been discovered in Tasmania. The age of the Arnhem Land rock paintings remains controversial. In the absence of accepted dates for their creation, they may evidence paintings from widely different pre-historical periods, and several different migrations into Australia. Their absence from the Tasmanian scene

suggests that pictographs were an imported tradition which had not penetrated south eastern Australia by the time Bass Strait was formed.

§ 4.3.4 Aboriginal Villages

Also enigmatic are the inferences to be drawn from the presence in western Tasmania, the Hunter Group, and on the south eastern fringes of the Central Plateau, of villages of permanent and substantial dwellings remarkably similar to the nineteenth-century dwellings of the eel farmers of western Victoria (Flood 1990: 219). Elsewhere in Tasmania the dwellings constructed were more flimsy, temporary constructions, consisting of bark strips or suitable foliage thrown over a horizontal tree limb, or onto a temporary frame of saplings which supported a skillion roof of bark or foliage. Typically the more sophisticated western dwellings measured some 12 feet by 10 feet with 7 feet of headroom at their apex. A frame of bent and fire hardened saplings tied at the top was inserted into the ground providing a solid base for thatching with bark and/or reeds. Most of the villages were constructed on the tops of large middens, and thus provided both good drainage, easy excavation of their floors, and presumably protection against the prevailing weather. The excavated floors had a depth of up to 1 foot. As well as providing extra headroom, insertion of the frame within the excavation provided security against the ballooning effect of strong wind gusts, as did the chocking of the inserted saplings with stones. The dwellings had small entrances measuring some 2 by 2 feet which usually faced east, thus again providing further protection against high winds and driving rain. Internally the dwellings were often insulated with birds' feathers and/or grass. (Plomley 1966: 144; Lehman 2002: pers.comm.). The only major distinction between these Palawa houses and the houses of the eel farmers is that the latter typically had stone walls which extended to a height of about 3 feet. So far as is known dwellings of this type were not built by any of the (south) Eastern clans (§ 2.3.2); nor by any of the Mara populations (§ 2.3.2). The identity of the builders of the villages seen on the Central Plateau is unknown. But they may have been constructed by Nara populations foraging over the Plateau.

§ 4.3.5 Ritual and other Practices

The rituals and magical practices performed by the Palawa at times of spiritual or other significant importance to them were poorly recorded, patchy in their content, and accordingly imperfectly known. As in the case of the Australian mainland (Elkin 1945:

ch. X), there would appear to have been a great variety of rituals with respect to similar events. Thus Palawa burial practices included cremation, disarticulation of the bones, tree hanging, and secondary interment, and in all these respects mirror practices commonly adopted on the Australian mainland. However, it is impossible to assemble a sufficient body of data which enables the making of any systematic comparison of the practices. It is not unlikely that the burial practices referred to evidence the porting to Tasmania at different times by different groups of migrants of different practices, but matters can be taken little further. What follows in this subsection is therefore illustrative only of the historical and ethnographical evidence available.

The dialects of (south) Eastern speech constituted a language which is clearly distinguishable from the Nara dialects spoken in south western Tasmania and along the lower reaches of the Derwent River on the one hand, and the Mara dialects spoken on the eastern side of the Derwent Estuary on the other hand (§ 5.2). The lexicons of (south) Eastern speech suggest that the language group was the product of the merging of two populations who spoke mutually unintelligible languages. The Nara component includes words which have apparent cognates in Mainland languages, and this suggests that Nara is in part the product of a migration from the Mainland (§§ 4.3.6 & 6.1.1.3). These surmises receive support from the following Robinson statement:

> (T)he Port Davey natives have the same customs as the Brune aborigines in the burning of their dead, manufacture of baskets, relics of the dead etc. All their females had three scars or cicratices on the back of each leg, about the middle of the calf, which is peculiar to themselves. Their dances are quite different .... Their huts are differently constructed from that of the Brune people. They are in the form of a semi-circular dome and are very commodious and weatherproof. (Plomley 1966: 143-144).

Then follows a detailed description of the strong permanent dwellings typically constructed by the Palawa of western Tasmania (§ 4.3.4). In other words, Robinson is noting both similarities and differences in various practices of the Port Davey clan (Western speech Nara speakers) when compared with the practices of the Bruny Island clan ((south) Eastern speakers). Although there is a general lack of comparative data, Robinson's comments suggest that he himself believed that he was observing the partial fusion of two cultures which differed in a number of these respects, a view also formed by Jones (1974: 337-338). Thus the Bruny Island dwellings were the skillion type structures constructed by the Mara clans, and those of the Port Davey clan the more robust type described in § 4.3.4. Plomley summarises and discusses the evidence with respect to scarification as a form of ritual, and the probability is that the different patterns

were significant identifiers in this respect. But again there is too little evidence, and too many gaps in the record to enable any firm conclusions to be drawn. (Plomley 1992: 39 and following).

§ 4.3.6 Linguistic Evidence

Ultimately a detailed description of the migrations to and within Tasmania can only be established by linguistic evidence, and in particular by place-name evidence. Whilst the provision of the diagnostic analyses necessary for this purpose is beyond the scope of the thesis, the existence and potential value of such evidence is easily illustrated. As an example see the discussion of Palawa and Warmambool words for *stone* in § 6.1.1.3. Comparisons of the words for *hand / fist / wrist* etc. provide further examples. In *Wordlist* (pp.85-87) a number of words for *hand* have been sublisted under <drar.bur.ic>; <treener>; <togue>; <rabalga>; <ree>; and similar groups of words for associated parts of this body extremity with <r>, <l> and <t> in word-initial position are listed on page 87. In *Macquarie* (p.637) the south eastern Australian words listed for *hand* include Bundjalung /daŋgan/; Sydney /damara/; and Wembawemba /yulp/. Without wishing to pursue the comparison too far, the words present as a genetically related group of words in which the differences in the initial segments can be explained by devoicing and lenition. A salient point is that there are a number of words of this type which have been supplemented by ostensibly unrelated suffixes. Some of these suffixes present as reflexes of *l^{y} = *two / many / large*, a morphemic segment and qualifier. See the words listed in Part A of Table 4.3.6, and compare the French interpretation of lexemes in this form (*Wordlist*: 13). The identification of counterparts of this lexeme in the nineteenth lexicons of the Mount Gambier-Warmambool region is beyond the scope of this thesis, but no reflexes of *l^{y} have been identified in the Mara lexicons. Other suffixes present as reflexes of a lexeme for *hand* etc. which in the languages of southeastern Australia typically took the forms /marnang/, /marra/ and /manye/. See Table 4.3.6 for these and further examples. The Palawa lexemes of this type are with one exception, confined to the Nara and (south) Eastern lexemes (§ 2.3.2). Plausibly the Palawa words thus evidence Nara progenitors, and in turn the migration to Tasmania of one or more populations in which reflexes of *marnang were words for *hand*. See Part B of the table. Some of these reflexes already possessed, or else later acquired conventional connotations which in appropriate contexts distinguished particular concepts with respect to hands such as *fist / knuckle* etc. As noted on page 3, Pama-Nyungan words cited in the thesis for other

purposes often provide clear examples of apparent cognates. See § 7.1.1.4; Table 7.4.2(b); Table 7.6.2.1.2(c); Table 7.6.2.2(a); Table 7.6.3.4(a); Table 7.6.8.1; Table 7.6.8.2; § 7.7.2; Table 7.7.2(a); Table 7.7.2(b); Table 7.8.2; and the table of apparent cognates in the Pallangamiddang vocabulary (insert).

In the Table bolding indicates the relevant lexeme(s) in a compound word. The symbols which precede the Palawa words indicate their geographical province, and the identity of the European recorder (§ 2.2.13).

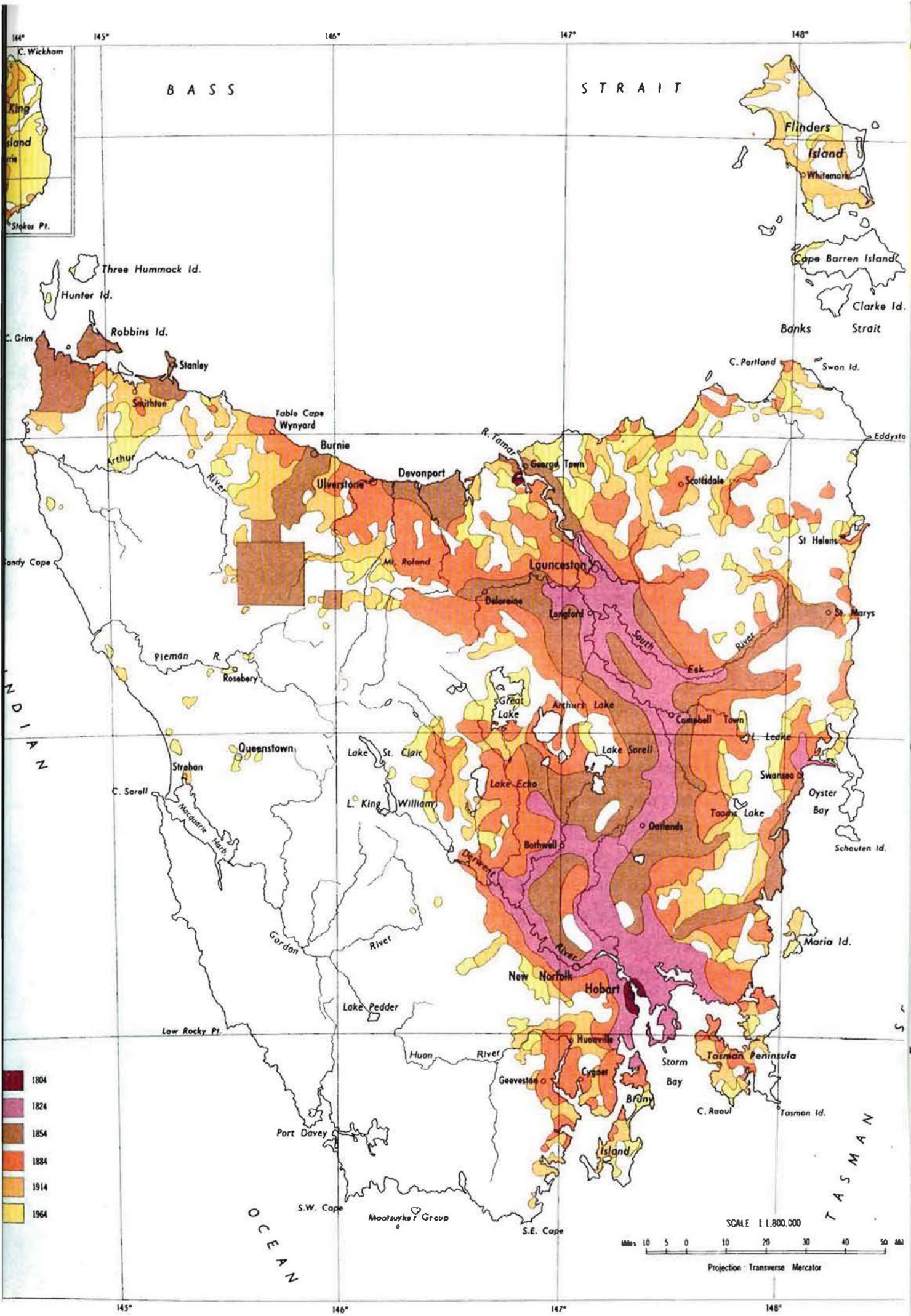
Table 4.3.6

Part A **Palawa words**

SE: jj	**rilia**	*hand*	SE: fr	**ri lia**	*mains*
SE: fr	ri-**lia**	*mains*	SE: fr	**riri**	*mains*
SE: fr	**riry**	*main*	W/NW: mj	leleenulah **leah**	*knuckle*
SE: fr	perai **lea**	*nails of fingers*	SE:fr	**toni lia**	*ongles des mains*
SE: mj	**reemutta**	*hand*	W/NW: mj	**ootamutta**	*left hand*
W: jj	**reannemana**	*fist*	SE: mj	**ree-mutha**	*fist*
E: mj	**rapoolmena**	*wrist*	W: cr	**te.ver.mur.rick**	*wrist*
SE: gar	**nore.der**	*left-handed*	-: sn	**mārthĕrĕrōoměnăr**	*nails*
SE: mj	**marah**	*five*	W: gar	**nor.ne**	*five*

Part B **Pama-Nyungan words**

Woiwurrung	**marnang**	*hand*	Warrnambool	**marrang**	*hand*
Diyari	**mara**	*hand*	Ngiyampaa	**mara**	*hand*
Paakantyi	**mara**	*hand*	Wiradjuri	**marra**	*hand*
Kauma	**marra**	*hand*	Bunganditj	**marra**	*hand*
Bunganditj	**marna**	*hand*	Wembawemba	**manye**	*hand*
Woiwurrung	babadi **marnang**	*thumb*	Woiwurrung	dhirribi-**marnang**	*finger nail*
Warrnambool	pirrng **marrang**	*finger nail*	Woiwurrung	<boothe-**manang**>	*palm*
Warrnambool	<leig**murring**>	*palm*	Warrnambool	takuk **marrang**	*palm*
Warrnambool	wart **marrang**	*fist / knuckle*	Warrnambool	pulut **marrang**	*fist / knuckle*
Bunganditj	**marruwiya**	*fist*			
Warrnambool	wart **marrang**	*back of hand*	Warrnambool	mit **marrang**	*back of hand*
Wembawemba	kepin **manye**	*five*	Ngiyampaa	**mara**	*five*
Warrnambool	kayap **marrang**	*five*			
Wembawemba	**pulety manye**	*ten*	Warrnambool	**pulayt marrang**	*ten*


144°
145°
146°
147°
148°
C. Wickham
King
Island
Stokes Pt.
BASS
STRAIT
Flinders Island
Whitemark
Cape Barren Island
Clarke Id.
Banks Strait
Three Hummock Id.
Hunter Id.
Robbins Id.
C. Grim
Stanley
Smithton
Table Cape
Wynyard
Burnie
Arthur River
Ulverstone
Devonport
R. Tamar
George Town
C. Portland
Swan Id.
Eddystone
Scottsdale
St Helens
Sandy Cape
Mt. Roland
Launceston
Deloraine
Longford
St. Marys
South Esk River
Pieman R.
Rosebery
Great Lake
Arthurs Lake
Campbell Town
L. Leake
Queenstown
Lake St. Clair
Lake Sorell
Strahan
C. Sorell
Lake Echo
Swansea
Oyster Bay
L. King William
Toosey Lake
Oatlands
Bothwell
Derwent River
Schouten Id.
Macquarie Harb.
Maria Id.
Gordon River
New Norfolk
Hobart
Lake Pedder
Low Rocky Pt.
Huonville
Huon River
Storm Bay
Tasman Peninsula
Geeveston
Cygnet
Bruny Island
C. Raoul
Tasman Id.
Port Davey
S.W. Cape
Maatsuyker Group
S.E. Cape
INDIAN OCEAN
TASMAN SEA
1804
1824
1854
1884
1914
1964
SCALE 1:1,800,000
Miles 10 5 0 10 20 30 40 50
Projection: Transverse Mercator

§ 4.4 Internal Expansion & Population Shifts

Late in the nineteenth-century Tasmanian geologists concluded that the first Aborigines to reach Tasmania did so by walking over dry land from Mainland Australia (§ 4.2). This entailed the then preposterous proposition that the sea had once been much lower. Progressively during the 20th century their theories in this respect were accepted by most well educated persons. For much of the 20th century it was not known whether during human prehistory this 'land bridge' had from time to time been severed, but it was assumed that there were long periods when it existed. Towards the end of the 20th century it was finally established that although its width had varied, dry land had at all times during the late Pleistocene connected Tasmania with Victoria (Chappell 1994). Unfortunately the theories were all too often uncritically accepted by others, and as a result not only the lay public, but archaeologists, linguists, the Tasmanian Aboriginal community and others have often assumed that at all times when there was a land connection Aborigines were able to pass from the Australian Mainland into Tasmania. Little or no thought was given to the fact that the Bassian Desert was at all times an arid and cold sand dune desert, nor to the effect of climate changes, nor to the possible blocking effect of resident populations.

Tasmanian archaeologists are presently of the opinion thatthroughout the Pleistocene the human exploitation of the higher regions of the Tasmanian land mass was seasonal only, and limited to the warmer months (Sim & Ranson - pers.com 2002). Various theories have been advanced by them with respect to the habitats of the Pleistocene populations during the colder months. These include the very plausible surmise that the Palawa retreated to lower ground during winter, viz the eastern, southern and western coasts, and in the north to the river valleys of the Bassian Desert, and less plausibly a surmise that their habitation sites have since been inundated by the rise in sea levels. Another hypothesis is to the effect that as a region the west coast would have been too cold for human inhabitation during the winter, and that there was an annual withdrawal to the Bassian Lake and its rivers (Ranson: pers.com), but this theory is a conjecture based on climatic modelling, is not supported by archaeological evidence, and is much less plausible having regard to the distances involved, and nature of the terrain to be traversed. There is general agreement amongst Tasmanian archaeologists that the size of thePalawa bands was small, and that that they probably comprised single extended families. Further in the case of Ranson, that their foraging was opportunistic, and as a

corollary that territorial rights were not asserted. A contributing if not determining factor with respect to the size of the bands, was the meagre nature of the available food resources (Ranson: pers.com). The warmer, wetter climate in the Holocene dramatically increased the biomass in many coastal regions, but was offset by the progressive afforestation of Tasmania from 14,000 BCE onwards (Kiernan, Jones & Ranson 1988: 61). Further examination and discussion of the various surmises will have to await etymological analysis of the Palawa lexicons and in particular the Palawa place names.

Chapter 5: The Palawa (Tasmanian Aborigines)

§ 5.0 Overview

As in the case of mainland Australia, the explorers who made contact with the Palawa before European occupation and settlement of their lands had little opportunity to observe or record information with respect to their languages, socio-political organization, and other aspects of their culture. Ryan (1981: ch.2) has usefully summarised the few contacts the maritime explorers had with the Palawa. The first recorded contact by Europeans occurred when Cook's third expedition to the Pacific took on water and wood at Adventure Bay, Bruny Island in January 1777. A few Palawa words were recorded, all of which are in *Wordlist*. Contacts with the Palawa were fleeting, and very little was recorded with respect to their culture (*Wordlist*: 11). Subsequently the D'Entrecasteaux expedition visited southern Tasmania for ten weeks in April-May 1792, during which time scientific investigations were made. The French recorded a number of observations with respect to the Palawa as a physical type, their artifacts, and their dialects as spoken in southern Tasmania (§ 5.2.1.2). A second French expedition, the Baudin expedition, visited southern Tasmania in 1802, and engaged in similar investigations over a similar period of time. Overall a much larger vocabulary was recorded, albeit confined to the same dialects. Similar comments apply to their observations of Palawa culture. The visits did not permit any adequate investigation of socio-political structures (*Wordlist*: 11).

Sometime prior to 1800 persons engaged in the sealing industry ('the sealers') took up residence at Kent Bay on Cape Barren Island, and other islands in Bass Strait. Research would suggest that no Aborigines had lived on the islands for more than four millennia (Sim 1999: 11). But the sealers quickly established contacts with Palawa living on the Tasmanian mainland (Ryan 1981: ch.3; Windschuttle 2002 *passim*).

In 1803 Lt. Bowen, under orders from the Governor of New South Wales, established the first official settlement at Risdon Cove in southern Tasmania. In 1804 Collins, under orders from the British Colonial Secretary, re-established the settlement on the opposite side of the Derwent Estuary (Hobart), and in the same year York Town was established in northern Tasmania near the mouth of the Tamar River (Ryan 1981: ch.3). Thereafter European settlement of Tasmania expanded at an ever increasing pace. That occupation, insofar as it involved land grants, is illustrated by the map of land alienations in the *Atlas*

of Tasmania (Davies 1965) which faces this page. But it will be kept in mind that the grazing of livestock, the hunting of fauna, and contacts with the Palawa clans both hostile and benign, extended well beyond the boundaries of the land grants. Unfortunately, and for a number of reasons, the information recorded by the European colonists with respect to the Palawa in the three decades which elapsed after the British settlement was also scanty. Another five decades elapsed before the last person of full Aboriginal descent died, but the socio-political organisation of the Aborigines had already been destroyed before the removal, and the decay and destruction of their languages and most of their culture automatically followed (§ 5.4). There was no systematic collection and recording of information with respect to the Palawa. Much of its recording was merely incidental to European activities, and rarely undertaken by persons with any adequate scientific or linguistic background. As a result the recorded information is usually anecdotal, patchy, and all too often ambiguous and otherwise untrustworthy. The major exceptions were the materials recorded in the journals and notes written by George Augustus Robinson (Plomley 1966), and partly drafted sections of a history started but never completed by Jorgen Jorgenson (Plomley 1991). In both cases the manuscripts were neither discovered nor edited, until the second half of the twentieth century.

With respect to the Palawa languages, there were contributions by other colonists and by visitors to Tasmania who had an interest in the Palawa and their culture and as a result recorded vocabularies both small and large. These persons are listed and their contributions evaluated in Chapter 6. At the end of the century, a comprehensive, informed, and mostly reliable description of the Palawa was published by the anthropologist H. Ling Roth (1899). Roth himself had no contact with the Palawa, but his work collected and systematically dealt with most of the information then available. Necessarily much of this was anecdotal, and its worth must ultimately be judged in the light of twentieth and twenty first century research by historians, archaeologists and linguists.

The twentieth century saw a plethora of publications, many little better than polemical exercises. In the fields of Aboriginal prehistory and culture, the best known academic writers are Rhys Jones an archaeologist, Lyndall Ryan, an historian, and Brian Plomley, who before his retirement had been an anatomist and embryologist. Plomley's principal descriptive works in these fields were *The Tasmanian Tribes & Cicratrices as Tribal Indicators among the Tasmanian Aborigines* (1992) which includes an extensive

bibliography, and *The Tasmanian Aborigines* (1993). In context, Jones's principal work was his paper *Tasmanian Tribes,* published as part of Tindale's *Aboriginal Tribes of Australia* (Jones 1974), and Ryan's *The Aboriginal Tasmanians* (1981). Professional archaeologists have undertaken much work in the field, but very little of their more recent work has been published. The most active have been teams led by Richard Cosgrove (see Bibliography), Sandra Bowdler (1986) and the work of two resident archaeologists Donald Ranson and Robyn Sim (1999). Contributions to the total body of present-day knowledge has been made by professional biologists and geologists; but their work is best described in conjunction with discussions of archaeological and similar matters. The twentieth century 'historical' publications present very conflicting views with respect to a number of important matters such as population estimates, and language classifications. Some suggest (incorrectly in my view) that the material culture of the Palawa was not only unusually primitive, but retrogressive (Jones 1977: 202-3; Windschuttle 2002 passim). Some academic publications to one side, most of the publications reflect the results of shallow and otherwise poor research. Even with respect to academic publications recent archaeological and linguistic research has revealed that many of the surmises expressed are seriously flawed, and/or else highly suspect. Serious criticisms of Jones and Ryan have recently been advanced by Windschuttle (2002), and my own research into the social and political organization of the Palawa summarised in this chapter supports his criticisms in several respects. But in no way do I endorse many of Windschuttle's other views and conclusions which are all too often themselves shallow and uninformed, and in linguistic matters ignorant and perhaps fabricated (Taylor 2004). The matters referred to will be discussed as appropriate in the thesis.

Nevertheless a broad understanding of Palawa prehistory and culture, especially with respect to their social and political organisations is essential to any adequate analysis and understanding of the Palawa languages. Accordingly the following subsections present a synopsis of the more relevant matters.

§ 5.1 Nineteenth-Century Population Distributions & Estimates

Various attempts have been made to estimate the total Aboriginal population of Tasmania at the beginning of the nineteenth century. Unfortunately there is simply insufficient data. In assessing the value of the various estimates which have been advanced, it is unfortunately often more important to assess the motives of the person who has proposed

a particular estimate, rather than the invariably meagre evidence and weak arguments provided to support the estimate. Suggestions by members of the Palawa community that the Palawa population was not less than 17,000 persons are clearly preposterous. At the opposite end of the scale Windschuttle has estimated that the total population did not exceed 2,000 (2002: 371). In common with all the other population estimates including the markedly higher estimates of Jones (1974: passim), Ryan (1981: passim) and Plomley (1992: 10-11), his demographic estimates are little better than mere conjecture.

The socio-economic structure of Palawa society is discussed in § 5.4. The structure consisted of 'clans' comprised of a number of 'hearths' ('families'). They were not organised as 'tribes', and references in historical literature to 'tribes' should be construed as references to clans. Practically the only information with respect to demographic matters is to be found in Robinson's journals (Plomley 1966). Robinson's observations were made in the late 1820s and early 1830s, that is after the virtual destruction of Palawa society. In the case of the west coast, and other regions where European settlement had had less impact, disease had literally decimated the clans he encountered, and was continuing to ravage their numbers (Plomley 1966: passim). Neither head counts nor estimates of the size of any of the clans or hearths are on record. No attempts to estimate the size of hearths has been attempted and, Plomley excepted, no-one would appear to have ever attempted to estimate clan sizes. Likewise no-one would appear to have ever attempted a calculation of the numbers which any of the clan territories might have supported. Nor has any attempt been made to compare the food resources of clan territories, one with another, nor by reference to regions. Available information with respect to the size of Mainland clans would not appear to have been considered. Whilst Robinson made enquiries with respect to the names and location of the clans, including clans which had become extinct, it can not be predicated that the clan names recorded by him constituted a complete list (Plomley 1992). The clan names have not yet been made the subject of a complete etymological analysis. However, it is clear that most of the known clans had more than one name. It seems likely that in many cases the name of a clan as used by its members of itself differed from the name or names by which it was known to other clans. The classifier in clan names was a locative classifier (§ 2.2.3). In the case of coastal clans this was almost, if not always, a reference to a bay, or in the case of most inland clans, a major river. Only a limited number of lexemes were used to

identify bays, and accordingly many of Robinson's names are ambiguous. In some cases they may evidence some confusion on his part.

Those population estimates which have been based on a division of the number of clan names into the total area of Tasmania, or the gross area of a particular region, or the total length of Tasmania's coastline, are obviously naive. There were a number of geophysical limits to Palawa activities. The Central Plateau and the north eastern highlands have alpine climates and vegetation, and subantarctic south western Tasmania is a mixture of open heath lands and rain forest, with the former predominating. The western ranges and most of north western and northern Tasmania west of Port Sorell were covered by either rain forest, or wet sclerophyll forest, vegetation which whether dense or clear of under storey supports little in the way of large fauna (Hocking & Guiler 1983: 1-23; Taylor et al. 1985: 7-14). In human terms the edible biomass of these open regions was up to three times lower than it was in other inland and coastal regions with open terrain (Ranson 2002: pers.comm.). Foraging in the highlands and much of the inland south west was probably limited to the warmer months and, the Lake Pedder region excepted, there is no evidence of year-round habitation of any of these regions prior to European settlement (Ranson 2002: pers.comm.). In northern and north western Tasmania tracks connected patches of open ground, but a very high percentage of these regions was covered by wet forests. Archaeological evidence, in particular a dearth of midden material (Cosgrove 1990: 72) and on balance the historical evidence, is clearly to the effect that from the mouth of the Derwent Estuary clockwise around to Port Sorell the coastal littoral supported few Palawa clans notwithstanding the presence of shellfish and crustaceans. In some favoured areas within these regions such as the Maatsuyker Group in south western Tasmania, the Cape Grim region, the Hunter Group and other north western offshore islands, seals, eggs, shearwater chicks and penguin chicks supplemented shellfish and crustaceans, and much of inland north western Tasmania was also relatively rich in food resources. For the most part the eastern ranges were covered by more open forests interspersed with marshes and other small areas of open ground. But the soils are thin and poor, the biomass low, and in terms of food resources this eastern region relatively poor. The Midlands and coastal plains provided abundant hunting. These variations in the different regions mean that the approaches used by Plomley (1992: 10 onwards), Jones (1974: Table 1) and others to estimate populations based on a division of the number of

clans into areas of land, and/or the length of a coastline, are too generalised, and misleading.

As might be expected, fewer clans were recorded in the regions with poor food resources, and there are clusters of names for clans in the regions with abundant food resources. Plomley was unable to come to any firm conclusions as to how many 'clans' there were (1993: 26 onwards), but the minimum number of 57 estimated by him is plausible; whilst unlikely, 79 as a maximum number is not impossible (Plomley: 1992: 12). The mean number of hearths in the clans inhabiting south western and western Tasmania can be inferred as a result of an examination of the sites of the west coast villages observed by Robinson, Kelly and others (§ 4.3.4). Coupled with observations that Palawa marriages were monogamous (Ryan 1981: 13), a reasonable inference is that each hut housed a single extended family or hearth (Greg Lehman 2003: pers.comm.). But as noted, there is no evidence as to the numbers of persons in a typical hearth. Lactation is a prophylactic in hunter food-gatherer societies, and presumably the life expectancy of infants was not in any case high. But it would also be dangerous to extrapolate the size of clans elsewhere from the size of the west coast villages. On a priori grounds the clans living in better resourced regions are likely to have been larger, and the observations of the French explorers (Plomley: 1992: 10) suggest thatthe Bruny Island and other clans of (south) Eastern speakers may have had up to 60 members. Taking all these considerations into account, the total Palawa population of Tasmania is unlikely to have been less than 2,500, but is unlikely to have exceeded 5,000.

There were some geophysical barriers that restricted contact between the Palawa of western Tasmania and the Palawa of the Midlands and eastern Tasmania in Holocene times. The densely forested and rugged western ranges that extend from the Southern Wellingtons west of Hobart as far north as north western Tasmania were the principal barrier. On a very narrow front there was contact along the coastline in southern Tasmania. The hinterland here was mountainous and much of it covered by dense forests. The northern coastline west of the Mersey River was also heavily forested, as was most of the country south to the Central Plateau. On a somewhat broader front from Port Sorell on the coast south to the Great Western Tiers there were open plains which permitted contact between the different populations referred to below. Contact between foraging parties from the different populations would also have occurred from time to time on the Central Plateau, but how friendly or close this contact was is not known.

Neither the present state of archaeological nor linguistic research can throw sufficient light on how effective these geophysical barriers were in terms of human contact, and thus in impeding genetic, cultural and linguistic interchange.

A relevant matter was the absence of seaworthy watercraft. Canoe-shaped catamaran-style boats with pointed ends comprising three rolls of bark or reeds were developed over the last 2,000 years, and may have first been used about 3,000 BCE (Ryan 1981: 9). The larger craft could carry up to 10 persons, and were equipped with a clay platform that enabled fire to be transported. Propulsion was by paddling with poles that had splayed (crushed) ends, and/or by swimmers who pushed the boats (Plomley 1993: 54-55). But it should be noted that Plomley alone refers to splayed poles, and that he did not cite his source. The craft ultimately became waterlogged, which placed King Island and the Furneaux Group beyond their reach. But the boats were also light, when first launched very buoyant, and as a result difficult to handle in heavy seas, surf, and strong winds. In terms of personal safety their use in the open sea was thus severely restricted. Historical evidence (Plomley 1993: 54 - 55) establishes their construction and use from Maria Island on the east coast clockwise around to the Pieman River in north western Tasmania. It is thought likely that boats were also used by north western clans to visit the Hunter Group and other resource-rich islands offshore north western Tasmania. Quite adventurously they were used in south western Tasmania to visit the Maatsuyker Group (some 8 km offshore) south of Coxes Bight. Notwithstanding their limitations the Bruny Island clan would appear to have used the boats when raiding for women on the Tasman Peninsula (Ryan 1981: 42-44; Plomley: 54-55). The North Eastern speech clans did not use boats, a fact which may reflect not only the fact that there are few resource-rich islands immediately offshore northern and north eastern Tasmania, but also and more speculatively that the North Eastern speakers had not long broken through to the coast, and that the necessary boat building skills had not yet been acquired. Their access to the protein-rich regions of north eastern Tasmania would also have reduced their need to exploit the offshore islands.

§ 5.2 The Nineteenth- Century Languages and Dialects

Crowley and Dixon commence their discussion of the Palawa dialects and languages (1981 § 1.4) as follows:

> It is clear that each local group of each tribe had a slightly different dialect from its neighbours, and some dialects could be grouped together as constituting a single 'language'

> (in the linguistic sense, defined in terms of mutual intelligibility – see Dixon 1980a: 33-40). *The important question concerns how many distinct languages there were in Tasmania.* (my italics)

The statement is based, at least partly, on a mistaken premise, viz that the Palawa populations were grouped as 'tribes', using that term in its modern twentieth century anthropological sense of a socio-politico-economic unit composed of a number of clans ('bands' / 'mobs' / 'hordes'). In fact the largest socio-economic unit was the clan (§ 5.4.). The assumption has affected their perceptions of the Palawa languages, and their description of its lexicons and dialects; and has similarly affected the assumptions of other writers on linguistic and cultural matters. Schmidt is the notable exception (§ 2.2.12).

The cautionary note placed by Crowley and Dixon in parenthesis is well warranted. Whilst the clans who spoke (south) Eastern speech did not constitute a tribe, comparative analysis enables categorization of their dialects as a language in the sense defined by Crowley and Dixon. Comparative analysis suggests that the dialects of Eastern speech should be likewise so categorized, but this is a matter best deferred until its lexicons are made the subject of etymological analysis. Otherwise the sketchy ethnographic record and the poverty of linguistic data make it impossible to group the various dialects as 'languages'. But to be fair to Crowley and Dixon, they qualified their remarks. Without endorsement on my part of all their comments, they state (1981: 399-400):

> It is, in fact, impossible to come to any definite decision concerning the number of distinct languages in Tasmania. Drawing the line between language and dialect is never an easy matter; it must involve a full comparison of linguistic systems- phonology, grammar and lexicon. The materials on Tasmanian dialects range from poor to almost non-existent: we have two or three hundred words from some of the south-eastern groups but only a dozen or so words from some groups in the western regions. There is almost no grammatical information – at best two pronominal forms.
> A preliminary judgement concerning dialect relationship can be made on the basis of vocabulary comparison (lexico-statistics) but this should always be followed up by a full comparison of the complete lexicons and grammatical systems.

A useful summary of comments by colonists and others who had contact with the Aborigines both before and after their removal to Wybalenna has been compiled by Crowley and Dixon (1981: 399-400). These comments make it clear that many of the dialects were mutually unintelligible. Without publishing their data, they also prepared a table (p.402) which they state was based on comparisons of cognate words from each of fifteen distinct regions, and as a result they drew inferences as to whether the dialect (or group of dialects) placed in each region was sufficiently distinct to be treated as a separate language, or else sufficiently similar to be considered dialects of the same

language. The results they obtained are plausible, consistent with Schmidt's conclusions (see below), and consistent with my own views as already expressed, and as supplemented below. Their overall conclusion was that the differences in the dialects point to a lack of mutual intelligibility between the dialects of the great majority of the regions. Their propositions do not of course justify the classifications of the groups of dialects as languages as stated by Jones, Ryan and Plomley.

Schmidt considered the same matters at great length, provided the lexico-statistical data he used to make his comparisons, and concluded that the data was insufficient to enable the identification of any particular group of dialects as a language (1952: 38-103). What he felt confident enough to state was that the dialects spoken in western, northern, north eastern, mid-eastern, and south-eastern Tasmania were sufficiently distinct to suggest mutual unintelligibility, albeit to different degrees. He eschewed any attempt to define the exact extent of the regions referred to by him, and accordingly did not define their boundaries. I agree with the fundamentals of Schmidt's approach and see no reason to disagree with most of his conclusions. I also see no reason to disagree with the tentative conclusions reached by Crowley and Dixon as a result of their study of cognate words.

To illustrate the matters discussed in this subsection Table 5.2 has been prepared. It indicates the very significant differences in the lexicons of the dialects spoken in the various regions. It also illustrates the fact that the (south) Eastern speech lexicons ostensibly comprise an amalgam of words which are apparent cognates of words in Eastern speech, and other words which have apparent cognates in Western and North Western speech. Those words that do not fit either of these categories are likely to be otherwise unrecorded Nara words, a matter which must be deferred until etymological analyses are provided. For what it is worth in a Palawa context, the English words translated into Palawa have been chosen from a photo-stated list of 200 words provided by my supervisor Associate Professor Ian Green as a list generally accepted by linguists who have studied the Pama-Nyungan languages as words which have cognates in a significant number of Pama-Nyungan languages, and which for this and other reasons are believed to be relatively stable. The listed Palawa counterparts are from western and/or north western Tasmania; north eastern Tasmania, eastern Tasmania, and from (south) Eastern speech. Words from northern Tasmania have not been provided, principally because of the dearth of recorded words from this region, as well as because of doubts as

to the proper geographical provenance of many words recorded as 'northern' (Plomley 1972: 77). The absence of counterparts from western, north western and north eastern Tasmania for a number ofitems reflects the absence of recorded words in respect of those items in those regions

My own impression of the differences noted by Schmidt (1952), Crowley and Dixòn (1981), and as a result of comparative studies of the type provided by Table 5.2, is that the various Palawa dialects are consistent with a substrate language which was overlaid later in different regions of Tasmania by several, but different intruding languages. This is consistent with the introduction of new lexemes by migrants from the Australian mainland. Materials in the thesis which illustrate the plausibility of such an interpretation have been provisionally discussed, and listed in § 4.3.6. To take matters further in this thesis would involve the provision of etymological analyses, and exceed its proper ambit.

A dash in Table 5.2 indicates that in the language group designated, no comparable word has been listed in *Wordlist*. It is believed that words placed on the same line are genetically connected. In some cases the connection will be immediately obvious. In other cases the connection has been partly obscured by pronunciation shifts, eclipsis, epenthetic alliteration, and the like. The differences in the other words are so great that they demonstrate in themselves that the languages spoken are unlikely to have been mutually intelligible, an inference confirmed by Davies' observations to that effect cited in Plomley (1976: 29). The English glossing of a line ofPalawa words is shown in the first column. When *Wordlist* records a different gloss for a particular word, that gloss is placed after the Palawa word, and in brackets.

Table 5.2

English	W/NW	(south) Eastern	E	NE
ashes /	-	pārtrōlt□ĕnnar	-	-
woodashes	ronghtuly	-	-	-
	-	toiberry	tontaiyenna	-
	-	wēent□ēnnar	-	-
belly	cawereeny	-	-	-
	long.wen	lomatina (*intestines*)	-	-
	-	maguelena	miulean	-
	-	poolumta (*flank*)	pol.lone.ner	plor.ner (*abdomen*)
	teenah (*stomach*)	teena (*stomach*)	teenah (*stomach*)	tay.tat.ten.ner

Table 5.2 continues

English	W/NW	(south) Eastern	E	NE
bite	-	-	dräng.ēr.nēr (*taste*)	dreep.er.cre.er.le (*taste*)
	-	-	-	iane
	-	lēeānnĕr	-	-
-	par.re.big.ger.er	-	-	
	-	rebkarranah	ralkwomma	-
black	-	loaparte	-	ly.hoo.ner
	-	mob.ber	marl.ler.pun.ner	mar.rip.pen.ner
	nar.mine.roun.ro.ick	-	-	-
	-	-	pile.lin.ner	pull.you.ner
	-	-	-	wore.ter.win.ner
blood	ken.ner	kenna-teewa (*bleed*)		- -
	-	-	mang.er.ter.min.ner	-
		bolouine (*rouge*)	balooyuna	preen.er.rur.rer (*vein*)
	tar.in.er	-	tentya (*red*)	-
	-	-	warrgata meena (*my blood*)	wain.ting.ing.er.ner
burn	-	laguana	lo-onge.her.er	-
	-	maranneck		
		bray.ly.poin.ne.vur.er	pue.nemin.ner	-
	-	with.er	-	-
cry	-	cockata	-	-
	-	moi-luggata	myluggana	mu.rer.car.ne
	-	-	-	gnaĩele
	neel.ler.lar.rar.rar	-	naoutagh bourack	-
	-	-	-	
	pe.cole.er.war.ter.pare		tar.rer.ker	tarragatte
	tagarramena	-		
cut	-	goe.gen.er	hu.ne.ner.pool.er	-
	long.he.lere.re	lue	logoone	-
	_	roguery	-	-
	-	tor.ger.rer	-	-
ear	cow.wer.reek	-	-	hen.ne.win.er
	lewlina	-	lur.ran.ner	-
	-	-	mung.ing.ner	-
	-	-	-	nin.ne.woon.er
	-	-	-	yer.na.win.ner
eat	giblee	kible	-	-
	man.ner.bib.le	malguera	-	mo.tar.ne
	nay.we.nimg.er	-	-	name.kun.ner
	par.tig.ger.rer	pagee	pew.ter.wat.ter	-
			pooloogoorack	
	tare.er	ter.ler.pare	telbeteleebea	ter.lar.er.bo.wer.le
egg	-	golanna gunganna	-	kome.kan.ner
	-	lee.ler.tee	lee.bune.ner	-
	-	-	muck.er.ter.loop.pen.ner	-
	palinna	par.teen.ner	-	-

Table 5.2 continues

English	WNW	(south) Eastern	E	NE
	troune.her	tee.bter.lag.gen.bner		-
elbow	nay.wun.dud.ic		_	_
	rowella	-	rowella	ro.wool.lar
	-	wienenna	wienennah	-
eye	-	lee.man.rick	lepena	lee.peen,ner
	mamericca	-	mone.tale.he	-
	num.mer.rick.er	nubrenah	nupoogamena	-
	pollatoola	plegurtethar	-	-
far	-	kan.tog.gana webbery		- car.thud.er.lo
	-	low.mar.bo	lowmawpa	-
	mun.der	maantah	marn.po	-
	rowe leah	renave	-	-
	trow.wer.lim.me.ter	tomalah	tongoomela	-
	-	wob.ber.roe	-	-
fingernail	-	lugga-tonnye		
	-	nil	-	-
	perrarunne	pereloigui	peyerena	-
	=	reerana	-	-
	-	ryeetonye	tone.yer	
	won.did.de.ker	-	-	-
fire	-	-	gen.ner.nar	cull.lar
	leipa	lopa	-	-
	-	-	my.ett.ta	-
	-	nube	nooena	-
	uen.nee	'ngune	-	ue.ner
	-	-	patarola	par.tro.ler
	-	-	tonna	-
	wighana	-	wenda	-
give	mul.er.ten.er	mare doungui	-	-
	-	pārrăgūnēe	par.er.wat.te.wer	-
	-	răppēe	-	-
	-	tee.er.ne.pair	te.an.er.pare	ter.ma.pare
go	-	cānghĕnnĕ	-	-
	-	līngŭrninne	lul.coo.mul.you.lar.ne	-
	-	marne.ne	malumbo	mare.ren.ter
	-	-	-	none.ta
	pate.ter.ten.er.rone.er.wong.he-		par.rer.way	pote.ter.rotr.ter
	-	ronda	--	
	tawelea mepoilea	tag.ger.rer	tabelty	top.pel.teen.ne
	wakannara	wob.ber.roe	-	-
ground	-	-	gunta	-
	longa	loe.run.yer.ly	-	-
	-	man.en.ner	-	-
	nar.ti	-	-	-
	-	-	pang.en.ner	-
	-	tri'ag'ūrbūgŭnĕr	try.er.win.er	-

Table 5.2 continues

English	W/NW	(south) Eastern	E	NE
hand	-	-	han.nem..been.er	
	han.ner.me.kar.len.ner			
	-	-	-	par.ler.te.min.ner
	-	nuna	-	-
	drar.bur.ic	togue	treen.ner	-
	rabalga	reemutta	-	-
head	ha.with.ick.ker	cuegi	-	hale.er.war.rer
	-	lay.noo.er.mar.ner	lay.noo.er.mar.ner	-
	muck.el.ten.ner	-	-	-
	nee.wid.de.ker	awittaka	ni.uin.ner	nale.woor.rer
	pulbeany	pur.rer.moon.ner	preg.ger.moe.ken.ner	-
	-	togari	toganee	-
man	kanna noangate	-	kekanna elangoonya	
	kal.loe.ker..me.ker.rer			
	lone.ner	lowatimy	lugga poerannea	-
		-	-	- me.you
	nim.de.ber	-	nowettye-eleebana	-
	pahlea	pallawah	puck.can.ner	pung.karn.ner
	too.gee	-	-	-
	wybra	wiebah	weiba	-
rock	-	heka	kughaweenya	-
	poningalee	potta mallya	boatta	-
	-	mir.rer.mal.ler.ge	-	-
	noanyale	-	narng.en.er	-
	jal.lop	tramutta	tendeagh	-
	loine	loinah	loantennina	lay.gen.ner
snake	-	-	goomer	-
	-	luthgar	loi.her.lee	-
	par.wer.rack.er	pawerak	preawintamettya	plen.ten.ner
	rawannah	-	-	-
tooth	cow.wer	canan	-	-
	-	paigui	-	-
	-	wughrinna	-	-
	-	pa-yana	yanna	yar.ner
woman	-	quadne	kroatta langunya	-
	lag.gen.er	lurga	lor.ner	lu.ner
	-	-	meneteruttye	
	muer.er.pi.pe.ne.re.pare		nar.kone.yer.lee nienate	nienna langhta
	-			
	pane.er	patarana	pugganatingana	pie.ther.pull.ta
	waggapoonynurrah	-	veet.yer	wore.ter.been.ner
wombat	koy.ber	-	kome.me.kat.en.er	-
	problattena	-	publedina	probe.lat.ten.ner
	roe.by	rowitta	rowoomata	-
	yuorbe.le.nu.be.bur.ick	-	-	-
urine	-	mingui	meen.ner	-

Table 5.2 continues

English	W/NW	(south) Eastern	E	NE
	-	ning.en.ner	-	-
	-	tiougle	-	-
water	lia winne	line.ner	liena	lar.cun.er
	mo.ker	mikany	mookaria	mo.ken.er
	par.nick.er	-	-	-
sea	-	-	-	clu.po.lar
salt water	leah le	lienna wuttya	lialeetea	lay.ken.kar.teen.er
	neeth.er.bar	nirripa	-	moe.kar.ten
	-	-	pol.ler.per.ran.ner	pun.nown

§ 5.3 Metaphysical, Metaphorical and Semantic Concepts

A description of any language, and in particular the languages of hunter gatherer societies, cannot be complete without some understanding and description of their metaphysical, metaphorical, and semantic concepts. A full discussion of the matters referred to can only be undertaken as part of an integrated approach which includes etymological analyses. However, one issue needs some discussion in this thesis.

For nearly two centuries, and continuing into this century beliefs and opinions with respect to the supposedly simple, even 'childish' mentality of the Palawa as revealed by their lexicons, continue to be expressed. Thus Windschuttle repeats, and presumably believes erroneous statements rarely made by the colonists, but asserted by early twentieth century philologists such as Ritz (1910), and writers such as Roth (1899: App.H). Notoriously he reached a number of erroneous conclusions of his own. Instructive examples will be found in (Ryan 1981: 9; Plomley 1976: ch.4; 1993: 72-4; in Windschuttle (2002: 99-101, 103-111, 115, 157, 262, 378). Some of Windschuttle's stated views have been specifically refuted by me (Taylor 2004). These views and beliefs should not be left altogether undiscussed.

A general twentieth century perception was that the Palawa had no ability to form abstract notions, and that they were virtually incapable of abstraction as a mental process. In the opinion of many commentators this is illustrated by a lack of collective nouns in their lexicons, and as well an absence of words for the 'finer sentiments' so typically expressed by 'civilized' peoples.

The first point to be made is that words for abstract concepts in most languages typically develop from metaphors and similes, and that necessarily Palawa metaphors and similes

were drawn from their own metaphysical beliefs, including their mythological beliefs; and in the light of their own cultural and other experiences. It is scarcely credible that Palawa beliefs and experiences would have always involved the same beliefs and experiences which inspired the formation of words for similar abstract concepts in the Indo-European languages. Thus whilst *hear* and *ear* are related words in English derived from IE *ous, the IE root for *deaf* was *dhoub which has the basic sense of *something lacking,* English *stupid* was derived from a Latin verb meaning *to stun, cranky* probably had its derivation from cant, and *crazy* from an OScand word meaning *crunched / broken into pieces.* The sole source of the Palawa words for all these concepts was from one or more words for *ear.* Table 5.3 provides examples.

In the Table, bolding indicates the relevant lexeme in compound words. Ostensibly two differently derived sets of words were involved, viz the set of words with **[k/g]** in word-initial position, and the set of words with **[w/v]** in word-initial position. However, it is not implausible to suggest that the latter set are reflexes of the words in the first set. It is suggested that the words in the second set evidence labiovelarization of **[k/g]** > [$\mathbf{k^w/g^w}$], followed in due course by dissimilation, and followed in its turn by eclipsis of **[k/g]** (§ 7.6.7.2). In other words, all the words listed are genetically related words. The symbols that precede the words identify their geographical provenance and their recorder (§ 2.2.12). Underlining in the Table indicates the second arm of what is believed to be a doubly reduplicated word.

Table 5.3

W/NW: mj	**konga**tueele	*crazy / cranky*	cf.	W/NW: gar	**kown.**de.yer		*ear*
?: gar	**kown.**de.yer	*heard / told*	cf.	W:cr	**kown.nar.rer.**boke		*deaf*
E: mj	**koullang**taratta	*dull / stupid*	cf.	?: gar	**ku.rib.**ber.ner		*ear*
				E: mj	**guallenga**tick	**guanghata**	*deaf*
SE: mj	**wayeelarra**boo	*stupid*		SE: fr	**vaigui**		*oreilles*
SE: mj	**wáyee**			*hear*	SE: mj		
	wayeebedé	*deaf*					

Cf. also

Warrnambool	**kurrng**kil	*crazy*	Bunganditj	**<worungan>**	*ear*
Bunganditj	**<wangan>**	*hear*	Bunganditj	murt **w'rrang**	*deaf*

A major, albeit unrecognized difficulty with respect to words for abstract concepts was the difficulty faced by both the European recorders and the Aborigines in exchanging information in relation to words which identify phenomena that cannot be physically

observed. Thus Dove after enquiry concluded (Miller 1981) that the belief of the Palawa in spirits was confined to evil spirits. He failed to ascertain the fact that there was a belief both in an after life for humans, and in 'great' spirits (*Wordlist*: 242). Similarly *lust* as a passion when physically manifested can be observed, and in this sense translated, but it is difficult to convey *love* as the finer sentiment so often connoted by that word when employed by nineteenth-century English poets. The words in *Wordlist* under the heading of 'LOVE' (pp.289-90) illustrate the points made.

The other major point to be made is that compound Palawa words often incorporate abstractions, a fact that usually remained unperceived by both the European recorders and philologists alike. (The French recognition of reflexes of *lia = *dual / plural* etc. § 7.6.2.2 was an exception). Typically many compound words were structured in the form of a classifier followed by an item. The classifier referred to a general category of objects, features or phenomena that included the object, feature or phenomenon to be identified. The item more specifically identified the object, feature or phenomenon. Thus in E: gar <**mar.ko**me.men.yer> = *road* (*Wordlist*: 374), the bolded elements were a general reference to *ground* as a region of country (cf. the words for *country* under subheading <man.en.ner> p.244), and the remaining elements metaphorically identified the road as a stream (cf. the words for *river* under subheading <me.nan.yer> p.372). As an example of an item which served as a collective noun, Schmidt identified *burak / *bōurak as a qualifier in Eastern speech which conveyed the associated ideas of *completeness* and *finality* (*fertig / vollendet / schon*) (1952: 229). The exact connotations conveyed varied in accordance with their context, but the concept included the ideas of *ripeness, death, the felling of a tree, sunrise, twilight, heat, dryness, to hear well, clutching, sinking, drowning,* and *weeping*. As further examples of abstract thought, including an ability to generalize, reference is made to the fact that they had words for the cardinal points of the compass (*Wordlist*: 204-206), and were able to comprehend, estimate, and express large quantities (Taylor 2004; cf. Windschuttle 2002: 157). On a more prosaic level, the Palawa had several collective nouns for *bird* (*Wordlist*: 159-160), but more usually items such as <yen.na> and <yolla> in the names for particular species of birds served the same role as do collective nouns (Table 6.7.2).

§ 5.4 Social, Political and Economic Organisation

The socio-political and/or socio-economic organization of any given population can affect the development of its language in a number of ways. In the Palawa context, contacts by clan members with persons from other clans led to the incorporation of new words in a clan's lexicon, not merely an individual's personal stock of words. Such changes were often associated with the adoption of new techniques. That changes of this kind occurred in Palawa communities can be surmised on a priori grounds, but for further proof must await etymological examination of the Palawa languages. As a corollary such contacts can result in the spread of semantic changes having a focal area elsewhere. Whilst much less likely, the contacts can also affect the phonology and grammar of a language. The matters referred to are well-evidenced cross linguistically (Hock 1991: ch.14). Thus in English, Brythonic and Gaelic, lexical borrowing led to an exchange of words, and in the case of English speakers the adoption of Celtic place names. The 'loan' words then spread into non-contiguous regions (Onions 1966; Ekwall 1936). The invasion of Anglo-Saxon England by the Danes in the tenth century, and of England by the Norman French in the eleventh century provide even more dramatic evidence including quite detailed evidence of the ways in which the socio-economic, and socio-political organization of both the Anglo-Saxons and their invaders influenced those changes (Crystal 1995: 25).

The Palawa clans were exogamous (Ryan 1981: 13 -14), and inasmuch as their social organization did not include tribal units (§ 5.4.2), did not practise the elaborate Mainland systems which involved bride selections regulated by moieties (Elkin 1945: 96-97, passim). Raiding for women was a Palawa practice, and may have been a product of bride bestowal practices (§ 5.4.2.1). The salient points are that in Palawa society 'marriage' necessarily aided lexical exchanges, and those exchanges would have had a potentially wider ambit than those brought about by 'marriages' within the same tribe.

Nevertheless the clans occupied defined territories in respect of which they asserted exclusive territorial claims (Davies 1846: 419; Plomley nd: 22; 31; 44, 56 and 144; Taylor 2004: 100-104). A continuing need to exploit new food resources meant that in most regions a clan was constantly on the move, but the movements were usually within the limits of the clan's home territory. The views expressed by Jones (1974) and Ryan (1981), to the effect that the clans participated in seasonal migrations which ranged from

the coasts to the midlands and highlands and back again, are not supported by any of the historical sources (Plomley 1966; Plomley 1991), nor by archaeological evidence (Ranson 2002: pers.comm.); nor by linguistic evidence (Taylor 2004). There is no evidence that the Central Plateau with its poorer resources and adverse climate was subject to territorial claims, and it is surmised that the region was accessible to whomever wished to forage there for the time being. Presumably this led to some contacts between Nara and Mara speakers. But interpretation of the little evidence available is bedeviled by the fact that the Central Plateau probably became a refuge area as a result of colonial appropriation of clan territories in the Midlands and elsewhere.

The matters referred to make relevant a discussion of the socio-political and socio-economic organization of the Palawa communities. The synopsis in § 5.4.1 provides information with respect to hearths and clans that is in no way controversial. That the Palawa were organized as tribes, in the sense of coalitions of clans into macro socio-political units, has been a received truth in the twentieth century, and was reinforced in academic circles by Jones's paper (1974), and in the eyes of both academics and the lay public by Ryan's work (1981). As will be explained later in this chapter, the view is not tenable. Clearly also the comment must again be made, that etymological analysis will in due course provide a clearer picture, and in particular etymological analysis of the clan names.

§ 5.4.1 Hearths and Clans

The basic social unit of the Palawa was the 'hearth', i.e. the group of persons who on a daily basis foraged together, prepared their meals and warmed themselves at the same fire, and who slept together in or under the same shelter. Basically the hearth was a monogamous family, expanded from time to time to include those persons such as aged parents, siblings, and other persons acceptable to the family and/or the clan chief (Ryan 1981: 12-13). There is no historical, ethnographic, nor archaeological evidence as to the size of the average hearth (§ 5.1).

A number of hearths habitually associated together as a clan ('mob' / 'horde' / 'band' - Ryan 1981: 12-13). When the food resources of an area became depleted, the clan as a group moved elsewhere, utilising for that purpose the reports provided by its individual hearths (Ranson 2002: pers.comm.). Whilst it is likely that much foraging was done by hearths and persons acting individually, organized hunting involving the whole clan was

a feature of clan activities. The clan also performed a political role. In the constant warfare engaged in by the Palawa peoples, the clan operated as a single and united unit, sometimes entering into temporary alliances with other clans (Plomley 1992; cf. Plomley 1993: 67; Windschuttle 2002: ch.4 and 381-382). The clans were exogamous (Jones 1974: 327; Ryan 1981: 13). The average number of human beings in a clan varied but there is little trustworthy historical evidence (§5.1). Based on the size of the Palawa villages in western Tasmania (§ 4.3.4), the clans in western Tasmania may have averaged out at between 30 and 40 persons. Elsewhere and speculatively, the clans in regions with better food resources may have averaged out at between 40 and 50 persons. Rarely would a clan have exceeded 60 persons, and there is no plausible ethnographic or historical evidence to the contrary.

§ 5.4.2 Tribes

§ 5.4.2.1 Nineteenth-century Historical Evidence

The evidence from all sources, except the linguistic evidence, has been collected by Plomley (1992: 3-8). As commented by him:

> For information about the Aboriginal groups in Tasmania, reliance can be placed on only one source, the papers of George Augustus Robinson. Even there particulars are often vague; and as well it must be remembered that Robinson made contact with the people only after they had been reduced in numbers as a result of their contact with the European settlers.

In nineteenth-century English the term 'tribe' was not a technical term. It had a wide range of meanings not always closely associated; but none of them included the sense in which it came to be used by twentieth century Australian anthropologists. The long entry for 'tribe' in the *OED* makes this clear. The historical evidence with respect to the Palawa makes it equally clear that the Tasmanian colonists used the term loosely, applying it to groups from as few as 20 persons upwards. Robinson's statements excepted, the references of the other colonists to 'tribes' were not purposive; i.e. they were not concerned to associate an observed group with any particular form of social organisation, nor with any particular type of economic or social activities. As used by laymen, English usage of the word has not changed very much since.

It was not until well into the twentieth century that in the terminology employed by anthropologists, archaeologists and persons engaged in allied disciplines, the term

acquired its present narrower technical meaning, and came to be used in contrast to other technical terms such as 'hearth', 'horde' etc. Thus Elkin defined a tribe as:

> a group of people related by actual or implied genealogy, who occupy and own a definite area of territory and hunt and gather food over it according to rules which control the behaviour of the smaller groups and families within the tribe (1945: 22).

In the remarks which follow, he makes it clear that in applying the definition, other factors are relevant. Those factors usually included the existence of a number of clans, the speaking of a common language often consisting of several dialects, the holding of gatherings for ceremonial purposes and to settle disputes, and the existence of kinship rules which governed the arrangement of marriages.

Jones used the term in its technical twentieth century sense, and for whatever reason glossed over the fact that his use of the term did not accord with Robinson's use of the word. Ryan and Plomley, in adopting Jones's use of the word, would appear to have been unconscious of the confusion he had introduced.

It is impossible to read the paper delivered by Backhouse Walker to the Royal Society of Tasmania (Walker 1902: 263 and following) without concluding that he used the word 'tribe' in the same general way as his peers. Robinson's frequent use of the word in his journals (Plomley 1966) and notes is clearer and more precise. He uses the word 'nation' synonymously with the word 'tribe', sometimes in the same sentence, but always in reference to groups which were clans only (e.g. p.523).

Walker's paper presents rather more serious problems when assessing the accuracy of its contents. He was a son of George Washington Walker. The father and a Quaker colleague James Backhouse visited Australia, including Tasmania, between 1832 and 1838. By then all but a handful of the 'tribal' Tasmanian Aborigines had been collected, and thus any information passed onto Backhouse Walker by his father, James Backhouse or others was anecdotal. He rarely cites his sources, but he himself commences his paper with the sentence 'Of the tribal organisation of the aborigines practically nothing is known, and the limits of the tribal divisions cannot be laid down with any certainty. (Roth 1899: 165). Necessarily any other information obtained by him was at second and third hand, and anecdotal and circumstantial. Insofar as he has recorded information which might suggest the existence of tribes in the sense used by Jones, it consisted principally of European sightings of large groups of Aborigines. A few of these refer to 'mobs' of up to 300

persons confined to adult males. The reasons for the presence of these groups, if in fact as large as reported, were not then known, and remain unknown. Groups of this size are not inconsistent with organised hunting expeditions (Hiatt 1996: Ch.2). Walker's paper includes the following statement: 'In 1830, Robinson stated that he had been in communication with sixteen tribes' (Roth 1899: 165), and then uses language which makes it clear that he had not understood Robinson's use of the word 'tribe' as anything other than as a reference to a clan. It is of course quite improbable that there could have been as many as sixteen 'tribes' using that term in its modern technical sense.

As I understand the evidence relied on by Walker, it was principally provided by settlers in the Tasmanian Midlands, a region which was profoundly disrupted from 1810 onwards. Apart from settler disruption the Mara dialects in this region can be divided into two groups, viz the North Eastern speakers and the Eastern speakers (§ 5.2), and the east west boundary between the groups ran through the Midlands. It is known that individual clans in the groups were in conflict with each other, and in fact the settlers noted the mutual hostility between the groups on several occasions (Plomley: nd: 22; 31; 44; 56; 144; Windschuttle 2002: 381-382). But none of this provides evidence for the existence of 'tribes' composed of a number of clans.

Jones summarises the sources of information used by him in preparing his paper, and leaves it clear that, some early colonial accounts excepted, there are in fact few if any references to 'tribes' in the accounts at all (Jones 1974: 319-323). Those accounts which do employ the word all suffer from the same interpretation problems as they do in Walker's paper. Those accounts excepted, Walker's paper and Robinson's journals constitute practically the sum total of the available historic knowledge.

§ 5.4.2.2 Jones's Paper

In 1974 the late Rhys Jones published a paper entitled *Tasmanian Tribes* (1974). The paper was based on a set of notes prepared by him in 1971 as annotations to Tindale's work (Tindale 1937). The notes were prepared from a reading of Robinson's journals as published in *Friendly Mission* (Plomley 1966). Jones asserts without qualification that the major Tasmanian social and political unit was the tribe. Ranking beneath the tribe were clans and beneath the clans, hearths. He makes reference to seasonal movements of the 'tribes', and of their ability to travel through the territories of other 'tribes', but without providing any citations. Ryan proffered the same conclusions, always in this respect

citing Jones as her reference (Ryan 1981: 14 and following). I have not discovered any ethnographic or historical evidence which supports either the broad sweep of Jones's assertions, or his conclusion that the activities referred to by him were 'tribal' activities as distinct from 'clan' activities. This is not to deny that Palawa clans were able to traverse the territories of other clans in certain circumstances, nor that the clans co-operated from time to time in various ways (cf. chs 2 and 4 in Hiatt 1996). Jones further asserts that each clan was associated with a wider political unit, that is a 'tribe', but again provides no citations in support of the proposition, nor evidence in support of the ways he alleges the two types of unit related with each other (p.327). The term 'tribe' is defined by him (1974: 328) to mean:

> that agglomeration of bands which lived in contiguous regions, spoke the same language or dialect, shared the same cultural traits, usually intermarried, had a similar pattern of seasonal movement, habitually met together for economic and other reasons, the pattern of whose peaceful relations were within the agglomeration and whose enmities were directed outside it.

As a definition of how anthropologists and some other academics use the term 'tribe' no-one would quarrel with the definition. But no factual evidence is presented which enables the definition to be applied to any of Robinson's 'nations', nor to any of the larger groups implied by the names for 'tribes' coined by the settlers. Nor with the sole exception of the (south) Eastern language have any of Schmidt (1952), O'Grady (O'Grady, Voegelin & Voegelin 1966), Crowley and Dixon (1981), or myself been able to classify which dialects should be grouped together as languages. Indeed Jones himself acknowledges that the then state of knowledge with respect to the Palawa languages precluded any determination of a one-to-one relationship of any Palawa 'language' with any Palawa 'tribe'.

Jones asserts (1974: 328) that the territory of a 'tribe' comprised all the land owned by its clans so that movement outside a tribe's territory, and of alien bands within it, could be carefully sanctioned. He further asserts that the territorial boundaries ranged from 'a sharp well-defined line associated with a prominent geographical feature to a broad transition zone found between two friendly tribes' That there were clan boundaries recognized by the individual Palawa clans is clear (Plomley 1992: 18-32; Plomley nd: 22; 31; 44; 56 & 144). But these publications were not available to Jones, and he provides no evidence for the existence of territories as tribal territories, nor for most of his other propositions. Again no citations are provided.

Finally on this point he asserts (1974: 328) that there were nine tribes; this notwithstanding his own obviously correct statement that the number of languages spoken must await a linguistic analysis of the new materials provided by Robinson's journals and notes. It would seem that Jones has either assumed, or else chosen to assert that the identification of the region in which a language is spoken ipso facto establishes the existence of a tribe, and that this fallacy has permeated his whole Paper.

§ 5.4.2.3 Linguistic Evidence

As noted, at the time Jones wrote his paper the then current knowledge of the Palawa languages and dialects did not enable application of his definition to specific groups of Tasmanian Aborigines in either linguistic or territorial terms. The evidence remains grossly inadequate for these purposes (§ 5.2), but there have been some useful advances. Observations by the colonists to the effect that there were a number of mutually unintelligible Palawa language groups have been confirmed by Schmidt (1952: 38-103). Jones's description of the 'languages' spoken in western Tasmania as related and comparable to a chain of beads on a string (1974: 331) is consistent with a comparative analysis of the words in the recorded lexicons of the dialects spoken from Macquarie Harbour clockwise around to the Inglis River. However, the Nara content of (south) Eastern speech needs to be more comprehensively identified and compared with these lexicons.

It is quite remarkable that the colonists failed to record the Aboriginal name of a single tribe. What is even more remarkable is that George Augustus Robinson, who lived with the Bruny Island clan for nine months as their administrator, and who later travelled amongst the Aborigines over a period which totals some four years neither referred to nor recorded any names for 'tribes' as such. Yet he recorded more than 100 names for clans (Plomley 1992). I add that his diaries demonstrate a lively and intelligent interest in the Palawa populations he encountered, their histories as related by them, their customs, and in particular their nomenclature and lexicons. In fact his diaries make it clear that if there were any social or political units of a higher order than the clans, then he was completely unconscious of that fact. Very significantly and as already noted, one of his terms for an individual clan was 'nation'.

No generic noun for *tribe* was recorded in the Palawa lexicons. On the other hand affixes which fit templates in the forms $((\mathbf{p_1}\mathrm{Vir_2}) + (\mathbf{r_2}\mathrm{Vr_2}))$ and $((\mathbf{m_1}\mathrm{Vir_2}) + (\mathbf{r_2}\mathrm{Vr_2}))$ were

incorporated in most of the names of the Mara clans. They identify the words as names for clans, and when compared with other words expressing aspects of magnitude, there can be little doubt that as suggested by Plomley, the lexemes can be glossed as *plenty of persons*. There are no Palawa kinship terms which suggest the existence of units larger than clans. Yet what is probably over 80 per cent of the clan names were recorded (Plomley 1992), and the quantity and quality of the recordings strengthen the inference that socio-political units in the nature of tribes or other permanently organised groups larger than clans did not exist. To sum up, there is no evidence which even remotely, let alone unequivocally or plausibly, supports a conclusion that the Palawa Aborigines had a form of social or political organisation which can be described as a 'tribe' in the sense that the term was used by Jones. Indeed the evidence is clearly and strongly to the effect that the largest form of social and/or political organization was that of the clan. One can only assume that Jones, Ryan and Plomley had an expectation that the Palawa had a culture which in most if not all respects was similar to the pre-contact culture of the Australian mainland Aborigines. That expectation would appear to have been so strong that it lulled them into a superficial assessment of the materials available to them.

§ 5.4 The Impact of European Settlement

§ 5.4.1 Population Decline

Contact with the maritime explorers excepted, there was a rapid and catastrophic decline in the Palawa populations from the time they came into contact with Europeans. That decline contributed in major ways to the gaps in the linguistic record (§ 5.2). Its effects in these respects will be described in § 5.4.1.

The European occupation of Tasmania commenced in or about 1798 when sealers established themselves at Kent Bay on Cape Barren Island, and elsewhere in the Bass Strait islands (Ryan 1981: ch.3). The islands were then uninhabited. It has been suggested by Ryan that at least in economic terms the early contacts by sealers were mutually beneficial involving an exchange of products and services. Ryan states that it did not involve hostilities. She further states that the bartering included the provision of Palawa women as labour and as sexual partners. (Ryan 1981: 3 and 67; Windschuttle 2002: 57). But assuming that the nature of the early relationship with the sealers has been correctly described, the nature of the relationship, perhaps inevitably, changed for the worse.

Raiding for women by some of the sealers led to warfare (Ryan 1981: 67 and following). The historic record places the sealers' major Tasmanian depredations in north eastern Tasmania. Whilst extremely disruptive, it nevertheless seems unlikely that bartering and raiding can account for the whole of the dramatic reduction in a Palawa population of some 400 to 500 persons in this region to some 20 persons by 1831. White settlement did not take place here until the last half of the nineteenth century, and the sealers' activities to one side there is no record of European/Palawa conflict in the region. In fact Jorgenson and others believed that the Aborigines living in this region knew that they could treat the region as a refuge from Government forces, and thus raid settled areas with some impunity (Plomley 1991).

A thesis on the Palawa languages is not the place to argue whether or not the history of the conflict between settlers and Aborigines in Tasmania justifies the use of the word 'genocide' as properly descriptive of either the official or unofficial campaigns to control the Palawa. But in my view both Reynolds (2001) and Windschuttle (2002) have amply demonstrated that statements by historians and others to this effect are not supported by the evidence. Such a view does not involve adopting the selective and pedantic standards of proof adopted by Windschuttle to support many of his conclusions. But Ryan's speculative and unsupported statements that:

> In 1823 the estimated population of the Big River, Oyster Bay, North Midlands, North East and North tribes was about a thousand. By 1832 156 had been captured, 50 lived with sealers,, and 27 lived with settlers... of the remainder, 280 were recorded shot, which leaves some 480 unaccounted for. It seems that even on the Tasmanian frontier only about one third of the Aborigines killed were recorded and that a more realistic total would be 700... (1981: 174)

must now be treated with scepticism. She makes no reference to the influenza epidemic which swept through the Palawa populations of southern and western Tasmania, and which had similarly affected Palawa populations living in their territories elsewhere, even though there are numerous entries in the first 90 pages of Robinson's journals (Plomley 1966). Not only she, but surprisingly Windschuttle and Plomley as well, would appear to have overlooked the fact that most regions of Tasmania in the coastal belt of clan territories which stretches from South Cape in southern Tasmania clockwise to Georges Bay on the east coast were not frontier areas, yet originally supported well over one-third, and perhaps more than half of the total Palawa population.

Numerous references in Robinson's journals make it clear that in 1829 influenza or some other form of pulmonary disease swept through southern and western Tasmania, virtually

decimating the Palawa populations (Plomley 1966: passim). Plausibly the same disease was the principal cause of the population decline in north eastern Tasmania as it was in western Tasmania. It is not unlikely that other debilitating, if not always fatal, diseases such as tuberculosis and syphilis were introduced by the sealers and the colonists. However, Ryan states that 'By 1807 ... disease had made no inroads' (1981: 78). The statement may well be correct, but she provides no citations or argument in support of her statement. Later she adds, again without citations or argument, that 'By 1818 the Aboriginal population of Van Diemen's Land had fallen from an estimated 4,000 to below 2,000 ... The first fifteen years of European settlement had brought no epidemics ...' (1981: 79). Ignoring what can only be speculation on her part with respect to population figures, the absence of any historical evidence of an epidemic before 1829 nevertheless supports Ryan's final statement. But it is also remarkable and disconcerting that apart from the numerous references in Robinson's journals there is only one other reference by her to the death of a Palawa from disease (Ryan 1981: 175). Whatever their incidence, the likely spread of venereal diseases and tuberculosis amongst the Aborigines in areas of contact with sealers was rarely recorded (cf. Plomley 1966: 995). Perhaps as a result of the lack of official records, no historians other than Windschuttle (2002: ch.10: 372-375, 223-224) would appear to have taken disease into account as a major cause of population decline, and even he does not appear to have fully comprehended the inferences which flow from a reading of Robinson's journals. The early sections of the journals (pp.1-90), written whilst Robinson was the Government administrator, speak of little else than his personal agony at the deaths not only of those Aborigines under his care, but also of the visiting Port Davey Aborigines. Reading between the lines with respect to his first journey to the west coast, Robinson's disappointment at making contact with so few Palawa around the south western, western and north western littorals is patent. He never admitted it directly, but he would appear to have lost about one-third of the Palawa who surrendered themselves to him to pulmonary disease before he could deliver them to the Government (Plomley 1966: passim). But in any case the number of Aborigines encountered by him were fewer than 300 in the regions referred to, and the clans themselves had been reduced from bands of perhaps 30 to 40 persons to bands which rarely numbered as many as 10. His observations can be compared with Jorgenson's observations recorded in 1827 (Plomley 1991: 8 and following) which note 'large' groups and suggest a much larger population overall. Not only had the clans encountered by Robinson when he commenced his travels been reduced to much the

same size as extended families, but the fact that he encountered so few bands points to the extinction of some clans, and the possible merging of other clans as a response to their losses in numbers.

As noted, the population loss amongst the south western, western, north western, and northern clans simply can not be explained by settler-Aboriginal conflict. The only regions of recorded settler conflict in the regions referred to were at Woolnorth in NW Tasmania with employees of the Van Diemen's Land Company, at Northdown between the Mersey River and Port Sorell in northern Tasmania, and by inference in the Tamar Valley (Plomley 1992). The remaining north eastern clans who before European settlement had occupied the rich hunting and foraging grounds of the Northern Midlands, Fingal Valley, and Tamar Valley are simply unaccounted for. Whilst undoubtedly a factor, deaths directly resulting from settler-Aboriginal conflict are unlikely to have been the only major factor.

Disease to one side, the progressive and relatively rapid expansion of European settlement over much of Tasmania and the clashes with the Palawa which resulted have been made the subject of numerous publications, but very few studies which provide relevant, and insofar as that is possible, accurate data. Many of the publications are polemical in nature. The lack of detailed and reliable historical information and quasi political factors which continue to operate means that there are in fact no studies which can be regarded as informative and accurate, as well as unbiased in their interpretations. A useful description of settler-Aboriginal conflict, including maps, was compiled by Plomley (1992 [A]). A more recent and at times detailed study, but polemical in nature, is that of Windschuttle (2002). There is little point in entering into a detailed critique of Windschuttle's criticisms of Jones and Ryan, but the criticisms to one side it is clear that many of the views espoused by Jones (1974) and Ryan (1981) can no longer be treated as authoritative, nor in respect of the matters under discussion, reliable.

The first Government settlement was at Risdon Cove in 1803, and from 1810 onwards settlement of Aboriginal lands proceeded with an increasing rapidity as a result of government encouragement of free settlers as farmers and graziers. The combination of a dryer climate in the last half of the Holocene, and Palawa land clearing practices had converted much of Tasmania into areas of open plains and open woodlands (§ 3.3). The regions occupied early by the settlers included the catchment and valley of the Derwent

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ed by J. L. Davies.

River, the plains of south eastern Tasmania and the Coal River Valley, the Northern and Southern Midlands, the Fingal Valley, and the Norfolk Plains which are an extension of the Northern Midlands to the west. Their initial exploitation by European farmers and graziers required little in the way of clearing or other improvements. Accordingly the areas were soon made the subject of land grants and/or de facto appropriations. At the same time it was these regions which had constituted major hunting grounds of the Palawa. Their appropriation initially reduced and ultimately effectively deprived the Palawa of their chief source of protein, a fact exacerbated by European hunting of macropods, wombats, emus and waterfowl. The hunting was not confined to hunting for sustenance, but included hunting to provide meat, skins and feathers for trading (Crowley 1993: 55-56; Plomley 1992 (A) - cf. Windschuttle 2002 ch.10).

There is surprisingly little historical evidence with respect to settler-Aboriginal conflict in the Derwent River valley and catchment, nor with respect to the fate of its Aboriginal populations. In 1832, when finally brought in for transfer to Flinders Island the *Lairmairrener* ('Big River tribe') numbered 40 persons (Plomley 1966: 572), and included the remnants of one or more of the clans known to the colonists as the Oyster Bay 'tribe'. Robinson recorded only a small number of place names and ordinary words in connection with his visit to the Big River 'tribe' in 1831. The settlers in the Derwent River valley and catchment recorded practically nothing, perhaps because there was soon little to record over most of this region.

Rather similar comments apply to the Northern Midlands (including the Norfolk Plains and the Fingal Valley as contiguous regions), the Southern Midlands, and the large coastal region of plains which extends from the eastern shores of the Derwent Estuary to the eastern ranges. Historical evidence of European–Aboriginal conflict in these regions is sparse, but in these regions there was little suitable unoccupied country to accommodate retreating or displaced Palawa populations. The eastern ranges would have provided only a temporary and poorly resourced refuge. Clashes with the settlers, including their shepherds, and with escaped convicts and bushrangers must have contributed both directly and indirectly to their demise. But again the historical evidence is sparse (Plomley 1992 (A); Windschuttle 2002: 151-2). This contrasts with the records of clashes along the east coast and in particular in the Swansea region where Aboriginal–settler conflict is well attested (Plomley 1992 (A)).

Clearly no firm overall inferences can be drawn. It was Government policy to protect the Palawa, and in the early decades of settlement when land settlement usually physically preceded surveys and official grants by several years it would not have been politic for the settlers to discuss too openly any repressive measures undertaken by them.

The other areas where extensive European occupation took place prior to the collection and removal by 1835 of the Aborigines to the Furneaux Group, were the extreme north western and Emu Bay areas granted to the Van Diemen's Land Company, and the Northdown region settled by Captain Thomas and others. Only one 'massacre' is recorded in respect of the Van Diemen's Land Company's Woolnorth settlement (Plomley 1966; Plomley 1992; Windschuttle 2002: 249-269). Matters noted by Robinson (Plomley 1966) indicate that in north western Tasmania European settlement had much less effect on the food resources left available to the Aborigines. Generally speaking their continuing contact with sealers and settlers seems to have been not as traumatic as elsewhere, but disease took a heavy toll in terms of mortality and morale. Northdown presents a more ambiguous picture. There were a number of recorded clashes, with a loss of life on both sides. However, the loss of their rather limited hunting grounds in a region dominated by wet sclerophyll forests would have been catastrophic for the Aborigines. Moreover the area is on the border of territories occupied respectively by Nara speakers and Mara speakers (§ 5.5.1), and there would probably have been few if any neighbouring clans disposed to accommodate a retreating or displaced clan.

§ 5.5.2 The Destruction of the Palawa Languages

As noted in § 5.5.1, historians have given less than adequate consideration to the effect of European diseases, and in particular the influenza epidemic on the Palawa. With respect to their languages whole dialects must have been lost, and the links between contiguous dialects obscured. This must have placed the numerically and, in terms of European culture, less sophisticated surviving Nara speakers at a disadvantage vis-a-vis the Mara speakers at Wybalenna, and all Palawa speakers vis-a-vis Government officials at Wybalenna, the sealers and other Europeans. These matters will be revisited in § 5.5.3.

There were other contributing factors. The Palawa were in twenty-first century Western terms a grossly superstitious people (Plomley 1966), and in particular had no understanding of the causes of disease, or of the scientific principles which had advanced the material culture of the nineteenth-century Europeans. It is also unlikely that a

population which had been isolated for the whole of the Holocene had any previous personal experience of mortal or otherwise seriously debilitating diseases; and there is simply no evidence which contradicts such a surmise. The effect on their morale must have been devastating. Many of the colonists (and in consequence many historians) believed that all credit for their bringing in should be given to Robinson. Windschuttle believes that the single major factor was the conclusions drawn by the Palawa with respect to white power, as evidenced to them by the operation known as the Black Line (178 and following). But all these surmises as single or even as major factors are implausible when applied to non-frontier regions.

Apart from disease there were other factors which must have had traumatic effects on both short term and long term Aboriginal morale, and in turn on the preservation of their culture, including their languages. The Europeans weapons were superior and devastating (Reynolds 1995: 51). From the Aboriginal perspective the European use of their guns and dogs must have also been unpredictable. Later the Europeans used Aboriginal trackers from New South Wales (Ryan 1981: 79). Similar comments apply to the many other superior advantages conferred by the European material culture. From the Aboriginal perspective these advantages included access to addictive substances such as alcohol, tobacco and, to a lesser extent tea (Windschuttle 2002: ch.4). Whatever ability the Aborigines initially had to trade with the Europeans soon disappeared. In lieu the handouts by settlers as individuals and the Government in the form of rations must have only emphasised to the Aborigines their own inferiority. The uncertainty of much of this provisioning presumably increased their anxieties. There is evidence that these factors tempted the Aborigines to abandon their traditional lifestyle and skills, and to become fringe dwellers (Windschuttle 2002: 125-126; Alison Alexander 2002: pers.comm. with respect to the Clarence Plains District; the words sublisted under <pueetoggan> glossed as *vassal* (*Wordlist*: 319)). Certainly these factors encouraged cohabitation by Aboriginal women not only with sealers, but also with white men in rural districts.

The encroachments of the colonists on the hunting grounds and other territories of the Palawa constantly gathered pace and never let up. The features to be referred to in this paragraph are shown in map 7 in the *Atlas of Tasmania* (Davies 1965: 5) facing this page. In numbers, the Whites continued to increase at a rate which to the Aborigines must have seemed exponential and overwhelming. Loss of their patrimony has often been advanced as a contributing factor in the ultimate demise of the Aborigines at Wybalenna and at

Oyster Cove. The psychological effect on them of the loss of their home territories may or may not have been exaggerated, but coupled with a loss of any real ability in socio-political terms to replace their territories by substituting the country around Wybalenna and Oyster Cove, the loss was no doubt a major factor in the lowering of their morale. We have little knowledge as to the effect of European contact on Palawa metaphysical concepts and spiritual beliefs. But again its effect on their morale must have been completely devastating. Almost any comparison by them of their own culture and beliefs with the superior efficacy of the Europeans must have led to a loss of faith in themselves, their leaders, and their culture. Indirect evidence is provided by the recorded incidents involving infanticide. This was not limited to offspring sired by Europeans (Roth 1899: 162), and has been recorded in other hunter food gatherer societies as a response to stress.

Christianity did not provide a salve. There were obvious language difficulties in the transmission of the unreal and abstract concepts involved in the theology of a sacramental and fundamentalist Christian church. But the Wybalenna evidence also suggests that to the extent that the Aborigines showed an interest in Christianity, it was as 'rice' Christians, that is the interest lasted only as long as material rewards were on offer (Miller 1981). As a people with shamanistic beliefs (Miller 1981: 42-44) they would have had great difficulty (and perhaps little interest) in understanding the concepts of a monotheistic universal invisible deity who as well as being all powerful, was constantly proclaimed to them as good and loving, when at the same time this divinity was so obviously unjust and negligent with respect to their health and material interests. But Robinson, Dove and the Government catechists were probably inadequate as religious teachers, and Dove and many of the catechists insensitive as mentors. It is suggested that it is this overwhelming loss of morale which accounts for much of the success of the Robinson missions, which as a major factor contributed to the abandonment by the Aborigines of their own culture, and which was a contributing factor in the destruction of their languages after their removal to Wybalenna. The consequences of population decline, coupled with the final destruction of the Palawa languages as outlined later in this chapter, become obvious when the paucity of the extant vocabularies and other recorded linguistic information is considered.

§ 5.5.3 The Development of Pidgin Languages

By 1832 almost all 'tribal' Aborigines had been collected and removed to Flinders Island. Those Aborigines who remained on the Tasmanian mainland comprised a few families in Nara regions who successfully kept themselves concealed in the Tasmanian bush, an unknown number of women who had become consorts of European males, and a number of children 'fostered' by the settlers. Crowley has collected most of the evidence, and suggests that there was a rapid development of forms of pidgin amongst the Palawa (1993). Some post-settlement Palawa words which are likely to have been included in the pidgin languages can be gleaned from a perusal of *Wordlist.* See -: sn <pyagurner> = *tobacco* (*Wordlist*: 434) that is 'baccy' with a Palawa suffix, E: jj <ted.qua> = *sugar* (p.423) i.e. an attempt to articulate the [s] in word-initial position, followed by labiovelarization of the [g];,and -: gar <li.cum.my> = *rum* (p.210) i.e. 'liquor'. Some further examples will be found in Westlake's vocabulary (Plomley nd: 65). As suggested by Crowley, the Palawa vocabulary was for a number of reasons inadequate to serve the need for new words in the post-settlement era (1993).

The first pidgin speech to develop was in the sealing communities (Ryan 1982: 150; Plomley 1976: 59-60; Crowley 1993: 58 and following). The pidgin speech probably consisted of English words for the most part, with a small admixture of Aboriginal words. Plomley and Crowley suggest that the Aboriginal component was for the greater part from Eastern and (south) Eastern speech, but this is speculative and inasmuch as pidgin speech has not been preserved, there is no satisfactory evidence. The fact is that a large percentage of the Palawa women came from north western Tasmania (a Nara region), a large but smaller percentage from north eastern Tasmania (a Mara region), a large but again smaller percentage from eastern Tasmania (another Mara region), a probably relatively small number of (south) Eastern speakers, a few from Victoria (regions unrecorded) and a few from South Australia (regions unrecorded but including at least two Kaurna speakers (Amery 1996)). Plomley in his review would appear to have assumed that the Mara speakers readily understood each other's dialects, but this is in fact unlikely (§ 5.2). Consistently with the evidence presented in the thesis, he assumed that the language of Palawa from north western Tasmania was unintelligible to the Mara speakers, a comment which clearly also applies to the languages spoken by women from the Australian Mainland. Estimates of the number of sealers' women range from about 100 c.1820, declining to 74 by 1830 (Ryan 1982: 71; Crowley 1993: 58). After a post-

1820 decline in sealing as a profitable enterprise most of the sealing communities were small and scattered, often comprising a single sealer and his family. It is unlikely that the sealers themselves troubled to learn more than a few Aboriginal words, and there was little incentive for them to do so. The sealing communities would have provided little opportunity for Aboriginal women to converse in mutually intelligible dialects. Inevitably the children of these relationships grew up in a society which spoke English as their mother tongue, and would have used and/or learnt few Aboriginal words.

Crowley suggests that as in the case of early colonial Sydney a pidgin language may have developed for use between sealers and the Aboriginal women (1993: 58), but this seems unlikely in the absence of any large and permanent mixed race communities. In any event there is no evidence of the presence of Aboriginal words in the English 'Straitsmen' dialects spoken by the mixed blood communities on Clarke Island and at Kent Bay during the nineteenth and twentieth centuries (Sutton 1976). Claims by the Language Unit of the Tasmanian Aboriginal Centre to the contrary may be correct, but have not been publicly substantiated. Perhaps pidgin languages developed at Macquarie Harbour, Hobart, and in farming districts such as Clarence Plains where fringe groups of Aborigines gathered. Similar comments probably apply to Port Dalrymple, Launceston, Stanley and Woolnorth. But if so there is almost no evidence (cf. Crowley 1993: 61-63), and apart from a few words, pidgin dialects are unlikely to have long survived the removal of the Aborigines to Wybalenna.

Some historical evidence is available with respect to the community at Wybalenna. (Crowley 1993: 63-65; Miller 1981: 43). But it is inconclusive with respect to the content of any new lingua franca formed. The contributions of English words by the sealers' women, the need of the Palawa to communicate with the Europeans at the settlement, and for words for new objects and concepts, all suggest that English would have been the main source of pidgin words, but not perhaps completely dominant. From the Aboriginal perspective much the same problems presented themselves as those encountered by the sealers' women. On the very limited evidence available Crowley plausibly suggests that a form of pidgin probably did develop. If so it would have hastened the demise of the pre-existing Palawa languages, and as a lingua franca it did not survive the death of Truganini in 1876.

Contrary to Crowley's surmises, Plomley suggests that '[a] local language was in use among the sealer's women, in which most of the words were those of the tribes of the eastern half of Tasmania, and predominantly those of the Oyster Bay tribe', and further that a local language of similar composition gradually gained ascendancy at Wybalenna (1976). He bases his surmises on the fact that words collected by Westlake in the period 1908-1910 from interviews with people of mixed race were mostly north eastern, eastern and south eastern. He further supports his surmises by stating that most of the sealer's women were from north eastern and eastern Tasmania (which is only marginally true); that at Wybalenna Aborigines from these regions predominated both initially and more so later as a result of the earlier deaths of western Aborigines; and that the eastern Aborigines were the more powerful 'politically'. The evidence for these propositions has not been seen, but assuming that the surmises are plausible, they remain speculative. They do not take into account the very different lexical content of the various Nara and Mara dialects. Nor does the surmise take into account the obvious advantage for the Aborigines to speak a pidgin which was also intelligible to the Europeans in command at Wybalenna and visitors including sealers, and would therefore have had English words as their major component.

§ 5.6 Palawa Kani

In the last decade of the twentieth century the language unit of the Tasmanian Aboriginal Centre took steps to develop a composite language which it entitled 'Palawa Kani'. The avowed purposes of the project included the development and perfection of a phonological and spelling system for the Palawa languages, and the reconstruction of a number of ordinary words, 'tribal' names and place names to better reflect their proper pronunciation (Palawa Kani 1998: 2). The hope was that the language developed could then be taught to and spoken by members of the Palawa community. Since there were a number of languages spoken at the beginning of the nineteenth century, and inasmuch as little is known about Palawa grammar, the project entailed the construction of an artificial language, a fact frankly acknowledged by the Unit.

Whilst Palawa Kani may to some extent have served its primary purpose, neither the language nor the materials prepared to enable its teaching should be accepted as a guide to the pronunciation of Palawa words in the original languages, nor with respect to most other features of the nineteenth-century Palawa languages. The persons who have

contributed to the project would appear to have uncritically accepted phonological features of the Australian Mainland languages as a guide to Palawa phonology without undertaking an adequate comparative analysis of the orthographies used by the European recorders, or of the Palawa phonologies themselves. Four examples will suffice.

In word elements in the form Cy it has been assumed that <y> transcribes either **[i]** or **[ei]**, this despite Milligan's clear statement that the sound articulated was **[j]** (§7.5.1.2). Milligan's statement is supported not only by his own transcriptions, but almost universally by the transcriptions of the other European recorders (§ 7.7.2). Furthermore most transcriptions of a **<y>** in final position evidence not the semi-vowel **[ei]**, but the palatalisation of an apico-alveolar stop, apico-alveolar nasal, bilabial stop, or lateral (§ 7.6.7.1).

The published vocabulary of the Unit indicates a belief that in Palawa transcriptions **<dr>** denotes a consonant cluster. In fact it transcribes a voiced post-alveolar fricative as a single segment, and **<tr>** transcribes its voiceless form (§7.6.3.4).

Finally it has been assumed that the rhotic in word elements in the form $C_1Vr(C_2)$ was an orthographical device inserted to indicate a long vowel, or the silent component in a digraph. Jorgenson was a Dane, Milligan and Scott were Scotsmen, Walker and Backhouse came from the northern (English) Midlands, and like the French speaking recorders all of them were familiar with the articulation of tapped rhotics, retroflexes, and other like rhotics. As persons living in an early nineteenth-century British colony, the Robinsons and the other English recorders from south eastern England would have been very familiar the articulation of tapped rhotics and retroflexes whether as articulated by their fellow colonists, or by the Palawa. Comparative analysis strongly supports the identification by the European colonists of tapped rhotics and retroflexes when transcribing **<r>** in Palawa words, and strongly discounts in most contexts the interpretation of **<r>** as indicating either **[a:]** or as part of a digraph (§§ 7.6.2.1 & 7.6.2.4).

The Unit has also stated that it is 'satisfied' that in Palawa the last segment was invariably a vowel. There were at least eighteen Europeans who recorded Palawa words, and it is clear that when a consonant was transcribed in word-final position very few of these words could have had a schwa or other undetected vowel as their final segment.

Thus <m> was word-final in a number of suffixes in the form CVm, and it is implausible to suggest that in these suffixes the Europeans without exception consistently failed to detect a final vowel.

Chapter 6: Sources of the Recorded Materials: Twentieth-Century Studies of the Palawa Languages

§ 6.1 Orthographical Overview

The great bulk of Palawa materials comprises individual words. Including place names, clan names, and personal names, there are some 9,000 recorded words; but of these a large number are apparent cognates or otherwise closely comparable. The distribution of the words amongst the recorded lexicons is quite uneven. The two best recorded lexicons are those of Eastern speech and (south) Eastern speech (§ 5.2). In terms of a basic vocabulary the lexicons of these two language groups are reasonably complete (*Wordlist*: *passim*). The lexicons of the other language groups are incomplete in varying respects, and in the case of Northern speech, very poorly recorded indeed.

Most of the ordinary words were listed by Plomley in *Wordlist* (1976), in effect a thesaurus rather than a dictionary. He also listed the indigenous place names and clan names identified by him in two separate publications (Plomley 1994 and 1992). He would appear to have relied on the Robinson materials as his sole source for place names and clan names. Some half dozen further place names have been identified. The identity of a number of the geophysical features named is either unknown, or uncertain. Minor features such as campsites and the like excepted, Plomley successfully identified many of these. Other identifications have been made by myself, a number as a result of field trips.

Plomley has listed most of the Palawa names for Aborigines which appear in the Robinson materials in Appendix 6 of *Friendly Mission* (1966). He would appear to have assumed that the names were personal names. Comparison of a number of the names with place names and clan names indicate that many of the names were appellations which referred to localities, and are unlikely to have been personal names. In other words they were similar to modern day terms such as *'Hobartian'*, *'Bruny Islander'* etc. They too have been made the subject of a preliminary study only. Further investigation of both the clan names and the personal names will probably enlarge the known data with respect to both place names and clan names.

Most connected utterances have been classified by Plomley as sentences and listed in chapter 5 of *Wordlist*, or as songs and listed in chapter 6. There are some 120 of the former, and 23 of the latter. Most of the songs remain untranslated. Those which have been translated have the appearance of chants which involve the repetition of strings of nouns, rather than as sentences.

The 'sentences' were recorded by George Augustus Robinson, Charles Robinson, Jorgenson and Milligan, and most of them were from (south) Eastern speech. The phrase 'connected utterances' is used because Charles Robinson, Jorgenson and Milligan glossed most of the utterances recorded by them as if sentences despite the fact that some of the utterances were single words, and many of them comprised no more than two words. In English most of the latter would be parsed as phrases, and not as sentences. Particularly in Milligan's case, but also in the case of Jorgenson, the English glosses are colloquial in form, and thus often connote shades of meaning which it seems unlikely could or would have been conveyed by the informant(s). The utterances may of course, have been supplemented by gestures. Similar groups of words were glossed much more literally by George Augustus Robinson, and in such cases rarely as sentences. A possible explanation is that Palawa syntax was not understood by the European recorders (Plomley's supposition, *Wordlist*: 5), or else, as deduced by Schmidt, there were no parts of speech in Palawa which either Indo-European speakers or Pama-Nyungan would recognise as verbs, and the words glossed as verbs are better classified as verbal nouns (1952: 197-220). Unlikely as it may seem, Schmidt makes a very strong case, and his views on this point received some endorsement from Capell (1968: 3-5). Some examples illustrate Schmidt's contention. In the phrase <Monna langarrapé> = *I like to drink water* (p.35) <monna> is an otherwise unrecorded word for *water* (cf. W: gar <**me.nude**.de.ker> = *water* (p.460), and E: mj <kukkamena **meena**> = *to trickle*) (p.461); <langarra> is a lexeme with a prefix <lan> which refers to *water*, and a suffix <garra> which connotes *action*, and in context the act of drinking (Schmidt 1952: 206-207). The suffix can be compared with the suffixes which in the words for *drink* sublisted under <loo.gen.ner>, <mue.kin.ner> and <nue.ger.rer> (*Wordlist*: 210) fit templates in the forms (k_1Vn_1V) and (k_1Vr_1V); and the prefix with the prefixes in the words for *water* sublisted under <lay.gen.ner>, <legana> and <liena> (pp.459 and 460). <pé> is a qualifier which denotes much satisfaction with the action denoted. In <Prughwullah packala> = *milk comes from the cow* (p.37), <prughwalla> can be compared with <proogwallah> = *woman's milk* and the other nouns sublisted under <parrugana> (p.121), and <packala> with <po.co.la> = *bullock* and the other nouns sublisted under <buck.er.ler> (p.293). None of the words recorded, and none of the word elements in those words, convey the concept of *comes from* as incorporated in the gloss. As maintained by both Schmidt and Capell, there is no evidence that any Palawa words which arguably can be parsed as verbs, were supplemented by grammatical affixes.

The Palawa words listed in *Wordlist* from page 81 onwards purport to be a complete list of the known ordinary words in the Palawa lexicons. Conveniently it has been prepared in the form of a

thesaurus, and under the major heading words which are apparent cognates, or otherwise closely connected, have been placed in subgroups. For unknown reasons, the words recorded by Westlake (§ 6.3.1) are not included. More understandably there has been no attempt to list the otherwise unrecorded words incorporated in Palawa 'sentences' and Palawa songs.

The largest collections of words were the vocabularies compiled by the French maritime explorers, George Augustus Robinson, his son Charles Robinson, Charles Sterling, Jorgen Jorgenson and Joseph Milligan. None of the eighteenth century and nineteenth-century European recorders were 'linguists'. The term is used in its broader sense. Systematic and informed studies of languages cross linguistically, and as an academic discipline did not commence until the end of the nineteenth-century. The orthographies used by the French explorers in their two expeditions were very similar, as were the spelling conventions adopted by Gaimard, another Frenchman who recorded words provided to him by sealers' women (§ 6.1.10). They would appear to have been internally basically consistent. The spelling conventions used by the English explorers, colonists and visitors varied, and present a number of difficulties. In the terms of modern linguistic methodology the transcriptions were amateurish, not completely phonetic, perhaps at times inconsistent, and perhaps at times even erratic. Not surprisingly the distinction between phonemes and allophones was rarely if ever recognised. Nevertheless in the case of the major recorders, they appear to represent earnest, and Milligan at times excepted, personally consistent attempts to record the sounds they heard.

Jorgenson excepted, none of the European recorders are known to have had any fluency in a second language. Ordained priests accompanied the French expeditions both as chaplains and scientists. As such they probably had an ability to speak, as well as read, Latin. But there is little evidence that they actively participated in the recording of Palawa vocabularies. It is not unlikely that some of the other scientists and officers had an ability to speak and/or read one or more classical or modern languages in addition to French. The persons who contributed to the recordings were naval officers and/or scientists and as such either well-educated 'bourgeoisie' or the well-educated scions of aristocratic families. The scientists also had training in modern scientific methods. The English recorders would appear to have had even less familiarity with foreign languages. Dove studied classical Greek for one year of his studies for a divinity degree (Miller 1981: 7). Presumably Milligan as a trained surgeon, those persons who were Anglican priests, and some of the other better educated colonists had an acquaintance with Latin and/or Greek and/or Hebrew, and in some cases with French.

Cross-linguistic phonetic systems had not been developed. The spelling conventions employed to transcribe Palawa sounds were necessarily the spelling conventions used by the recorder to write his mother tongue. The spelling conventions used by English speakers were, and still are unsettled in a number of respects, and at times differed amongst the various recorders. French spelling conventions were relatively well settled by the end of the eighteenth century, at least amongst the educated classes. Even though eighteenth century written French employed digraphs and continued to transcribe no longer articulated consonants, the conventions provided a basically consistent spelling system which in turn allows one to determine reasonably good approximations with respect to the articulation of most of the Palawa consonants and semi-vowels. The nineteenth-century French conventions did not differ in any significant respects from the spelling conventions presently used in the 21st century. English spelling conventions had also become more settled before the beginning of the nineteenth-century in the sense that printing houses had achieved a considerable measure of spelling conformity in the publication of books and other written material, and as a consequence the conventions adopted by the printing houses had largely been accepted by members of the educated classes. But at no stage in the development of written English has its conventions resulted in the use of a completely consistent or logical phonetic system. In fact there have always been developing divergences between spoken and written English ever since adoption of the Roman alphabet in Anglo-Saxon times. Furthermore whilst there were social and other pressures upon well-educated English speakers to use generally accepted spelling conventions, it was not until the introduction of universal education early in the twentieth century that substantial conformity was achieved (Crystal 1995: 66 and following). The matters referred to create potential difficulties in that for example, <**er**> as a transcription may denote a form of schwa in the case of some recorders, and denote **/ɛr/** in the case of others. Differences in the eighteenth and nineteenth-century regional English pronunciations of Great Britain sometimes leave uncertain the pronunciation of Palawa words as recorded. The point has particular reference to vowels and diphthongs. As a result of all these matters the articulation of Palawa segments, as recorded, suffers from a number of actual and/or suspected ambiguities.

The transcription of Palawa words was not aided by the fact that it is likely that in Palawa there were segments that were not articulated in either English or French (see Chapter 7). Thus whilst it is not unlikely that in Palawa a dental nasal was articulated (§ 7.6.1.4), it is quite unlikely that the segment would have been distinguished from apico-alveolar nasals by the European recorders, and accordingly they were not transcribed. Similar comments apply to most transcriptions of <ly> and lVV. On the other hand a post-alveolar fricative transcribed as <**dr/tr** > (§ 7.6.3.4) was often

distinctly 'heard', and thus frequently identified. The dorso-velar nasal does not occur in English as a segment in word-initial position. Transcriptions by Milligan in the forms <'ng> & <ung> evidence his identification of the sound as an initial segment, and <'ng> may distinguish an aspect of its articulation as an initial segment in a word from its articulation as a medial or final segment(§ 7.5.1.1). The ostensible failure of both the Robinsons and Jorgenson to record the sound as an initial segment in many words thus raises problems which are discussed in § 7.6.1.1. Transcriptions of <ly> and <lia> suggest that a laminal-dental obstruent was heard. Whilst in spoken English both thorn and eth are phonemes, they were not if both were articulated in Palawa, distinguished. In fact the exact nature of the Palawa laminal stops more generally is uncertain. With respect to the vowels similar problems arise. In particular many of the English recorders did not transcribe stress, and/or neglected to distinguish between diphthongs and vowel clusters. Because of the orthographical difficulties created by these and other matters, it will be appropriate to discuss in some detail the backgrounds of the European recorders, and insofar as they can be ascertained the spelling conventions adopted by each of them. It will be noted that the recorders of some of the vocabularies have not been positively identified.

Plomley in *Wordlist*provides information with respect to the primary sources of the vocabularies from which his thesaurus was prepared (Plomley 1976: 5 and following). There are a large number of sources, and as eighteenth century and nineteenth-century manuscripts they are mostly held in overseas libraries or otherwise not readily available in Tasmania for examination. He uses suitable symbols to identify the European recorder (or collection) when listing Palawa words, and provides an index on pages 79 to 80. The basics of his approach have been adopted to identify both the recorders, and the geographical provenance of Palawa words (§§ 2.2.12 and 2.2.13).

§ 6.1.1 The English Maritime Explorers

Cook's journal of his third voyage to the Pacific was published by the Hakluyt Society (Beaglehole 1967), and was supplemented by other journals including those of William Anderson and David Samwell. Anderson's and Samwell's journals include a few words recorded on the expedition's visit to Bruny Island (*Wordlist*: 11-12). Anderson was a ship's surgeon and a naturalist (Lee 1906). It seems likely that he personally participated in the collection of the words recorded in his journal (Plomley 1976: 11). Samwell was also a surgeon (Lee 1906). It is not known whether he personally participated in the collection of words in his journal. Presumably both men were well educated, and had some acquaintance with Latin. But if so, the Latin

pronunciation taught to them was probably 'Court Latin', an anglicised pronunciation of little extra use to them in their interpretation and transcriptions of Palawa phonology.

§ 6.1.2 The French Maritime Explorers

The D'Entrecasteaux expedition visited Tasmania in 1792 and 1793. Two accounts of the expedition were produced soon afterwards, and both incorporate lists of Palawa words. As well some individual officers in the expedition compiled their own vocabularies (*Wordlist*: 9-10). Whilst the names of the persons who personally participated in the collection of the words are not recorded, it seems likely that all the participants were officers and well-educated persons.

The Baudin expedition visited south eastern Tasmania in 1802. The 1824 second edition of *Voyage de decouvertes aux terres australes* authored by Péron and Freycinet provides an account of this expedition, and includes a vocabulary collected by members of the expedition. Subsequently John Lhotsky published a vocabulary (Lhotsky 1839) which included words probably obtained originally from Péron when the expedition visited Sydney in 1802 (*Wordlist*: 10). This vocabulary supplements that published in the accounts of the D'Entrecasteau expedition. The names of the persons who personally participated in the collection of the words were not recorded, and may or may not have included Péron and Freycinet.

The vocabularies rank amongst the largest of the Palawa vocabularies collected. They are mainly confined to words from (south) Eastern speech. But the second expedition did collect a few Eastern speech words. A large number of words were recorded for the human anatomy and its fluids, birds, scale fish, edible shellfish, crustaceans, insects, humans in their various kin relationships as adults and thus as spouses and parents and children, verbal nouns which expressed activities that involved multifarious activities such as cutting and striking as actions, death as an event, sexual intercourse, diving, drinking and eating, fire as a managed event, the act of giving as a human activity, other human movements and actions such as travelling, seeing, sitting, sleeping, talking, and as associated objects human shelters, boats and their equipment, human decoration and ornaments, trees and their parts, seaweeds, grasses and ferns particularly if edible or useful in the making of artefacts; stone tools, pronouns, and numerals. There was thus a heavy concentration on words to do with the Palawa as humans and their activities as such.

§ 6.1.3 George Arthur Collection

A miscellaneous vocabulary of about 30 words is listed in the Arthur papers, a set of manuscripts housed in the Mitchell Library. The person or persons who collected the vocabulary is unknown (*Wordlist*: 7). There is no recorded information with respect to the spelling conventions employed. Nor does the list indicate the geographical provenance of the words, or when the vocabulary was compiled. Plomley comments that the selection is of words which would be chosen by a person 'having little schooling, a view which receives added support from the renderings of the aboriginal words.' (1976: 7). Whilst it is difficult to understand how Plomley reached this conclusion, the selection of words does seem to reflect an idle curiosity, rather than a systematic attempt to produce an instructive collection. Plomley incorrectly states that 'most of the words are from eastern and north-eastern peoples, but there are one or two words from peoples of other regions.' The collected vocabulary included words from several different language groups, and if a single person was the recorder it seems likely that it was someone in contact with the Aborigines at Wybalenna.

§ 6.1.4 Backhouse and Walker

James Backhouse (1794-1869) and George Washington Walker (1800-1859) were Quakers from northern England. Backhouse was a botanist. They visited the Australian colonies from 1832 to 1838, and visited Flinders Island in 1832 and in 1833/34 (*Wordlist*: 7-9). Some songs as well as individual words were recorded on their visits to Flinders Island. Their published journals and other works indicate that they were well-educated and observant persons. There is no reason to think that they were not of a careful disposition in their recording of their vocabularies. Each recorded a corpus of some 50 words, but with considerable overlapping. Nearly half the words refer to the human anatomy, but the rest are a miscellany.

Walker described his basic methodology, which consisted of the pointing out of objects, the repeated enunciation of the Palawa word by several Aborigines, transcription of the word, followed by his own pronunciation of the word as a check. He provided information with respect to the spelling conventions adopted by him in transcribing vowels, and marked stressed syllables by a line placed above the syllables. His pronunciation guide is set out in § 7.5.2. Backhouse provided no supplementary comments. His vocabulary exhibits some minor spelling differences in the transcription of vowels. No information as to the geographical provenance of the words recorded was provided.

Plomley's comment that 'it is clear from their relationships that (the words) are eastern words' (1976: 9) is in my view mistaken, and in my view reflects his poor understanding of the Palawa lexicons. The vocabularies contain a mixture of words from both the Nara and Mara language groups (§ 2.2.12), and from (south) Eastern speech (§ 2.2.12). It is obvious from his notes on word associations, that Plomley has not understand that the lexicons of (south) Eastern speech included both Nara and Mara words, and tended to treat all (south) Eastern words as Eastern words. Whilst closely comparable words were recorded by other European recorders, the geographical provenance of the words cannot always be determined.

§ 6.1.5 Bedford

William Bedford (? 1781-1852) was an Anglican priest, and as such well educated. He was stationed at St. Davids Cathedral, Hobart. The vocabulary of nearly 70 words attributed to him (Plomley 1976: 11) carries the initials H.W.M. and is limited to words from Eastern speech. The initials may indicate that it was compiled not by him, but by Horatio William Mason, whose occupations included those of general dealer, publican and wine and spirit merchant (*Wordlist*: 10-11). Without explanation Plomley comments that 'the vocabulary does not seem to be the work of a well educated man'. I have not noted anything in the transcriptions, nor in the way the words were glossed, which supports such an observation. There is no known information as to the spelling conventions adopted.

§ 6.1.6 Brown

Robert Brown (1773-1858) had a comprehensive education, studying medicine at Edinburgh as well as botany. His subsequent career as a leading scientist of his day supports the inference that he was a well educated man. (Lee 1906). He recorded 30 (south) Eastern speech words. There is no recorded information as to the spelling conventions adopted.

§ 6.1.7 Cunningham

Allan Cunningham (1791-1839) was a botanist by profession, but commenced his career as a botanical collector for the Royal Gardens at Kew, in the United Kingdom. He was probably a largely self-taught, but broadly educated man (Lee 1906). His vocabulary of about 15 carefully transcribed words was recorded on a visit in 1819 to Macquarie Harbour as a botanist and member of a surveying expedition commanded by Phillip Parker King. There is no reason to

doubt his authorship of a list of words in manuscript form held by the Mitchell Library. These words show stress marks. Another list appears in King's narrative of the expedition. Plomley believes that Cunningham's authorship of these additional words is more doubtful (1976: 12). There is no recorded information as to the spelling conventions adopted.

§ 6.1.8 Dove

Thomas Dove (?1803-1882) was a Scotsman and Presbyterian minister. The Reverend RS Miller has written a short, perhaps over-sympathetic biographical history of Dove's time as the Government chaplain at Wybalenna, Flinders Island, for three years from 1838 (Miller 1981). Dove obtained his MA in theology which involved eight years of university study, and included one year of classical Greek (Miller 1981:7). Much of the biography is based on the written reports Dove provided to his superiors in the Van Diemens Land Government (Miller 1981:38-92). For reasons unknown, Plomley does not include information with respect to Dove in chapter 2 of *Wordlist.*

Dove's vocabulary comprises 76 words, and in subject matter covers a miscellany of unrelated subjects. Dove's private notes do not appear to have been preserved. Words attributed to him in *Wordlist* were obtained from Jorgenson's vocabularies (see below) where they were marked with an asterisk. Jorgenson claimed that he obtained the words from documents in the office of the Colonial Secretary, a claim indirectly supported by the Biography. So far as is known Dove did not describe the spelling conventions used by him. It is noted that Miller had access to original documents in the archives, and that his transcription of some of the words mentioned in the Biography differ from those of Jorgenson, but not significantly.

Dove asserts that he attempted to learn the Palawa languages to aid his instruction of the Aborigines in religious matters, but gave up the attempt when he found no words in the languages which described a superior being other than a malignant being, and when he was unable to obtain the co-operation of the Aborigines in this task (Miller 1981: 42-44). One suspects that his temperament, a patronising approach to the Aborigines, and his mind set as a member of the original Secession (Calvinistic Presbyterian) Church explains his failure. He resented and complained of the friendly relationship which Robinson's sons had with the Aborigines. Throughout much of his tenure of office he had mutually hostile relations with Government officials stationed at Wybalenna, including George Augustus Robinson (Miller 1981: 93 and

following). Ultimately he was removed from office by Government fiat (Miller 1981: 99), possibly a significant fact in any assessment of Dove's temperament and abilities.

With respect to the Palawa languages Dove refers to the difficulties encountered by him by reason of the existence of 'three or four tribes, whose respective languages are totally distinct' and later adds (Miller 1981: 43):

> I conceive myself warranted to affirm, that the nouns and verbs of which (the languages) consist are not marked by anything like flexion; so that the vague and indistinct form in which instruction on any subject could be imparted by their means may be easily be conceived.

He indicates that he had endeavoured to record sentences as well as individual words, but without success. Whilst his temperament and attitudes may explain his reference to an absence of inflections, and his inability to record sentences, more probably it confirms other evidence which suggests thatthere were no grammatical affixes (§ 6.1; Schmidt 1952: 197-220S).

§ 6.1.9 Fisher

Peter Fisher was a naval surgeon, and presumably reasonably well educated. The authorship of a short hand-written list of 25 Palawa words found in an 1842 volume of *Tasmanian Journal of Natural Science* is attributed to a Dr. Fisher, presumably the surgeon. But whether or not he personally collected the words and if so his methodology, and any specific spelling conventions adopted by him, are all unknown (*Wordlist*: 14).

§ 6.1.10 Gaimard

Joseph Paul Gaimard (1793-1858) was a French zoologist who compiled a list of about 100 words (Plomley 1976: 14) when D'Urville's 1826-1827 expedition visited King Georges Sound, Western Australia. His source of information was a Palawa woman who was a member of a sealing community. The list is headed 'Vocabulaire de la langue des habitans du Port Dalrymple'. Port Dalrymple is the name of the harbour at the mouth of the Tamar River, and from 1804 there were settlements at George Town on its eastern shore, and at York Town to the west of the harbour. He also compiled a list of some 160 Kaurna words on the same occasion (Amery 1996: 45), and as in the case of the Robinsons his spelling conventions, and more indirectly the spelling conventions of the French explorers, can be compared with the spelling conventions adopted by Teichelmann and Schürmann who recorded a large percentage of the Kaurna vocabulary. Presumably Gaimard was a well educated man. His vocabulary of 81 words is eclectic with a bias

[illegible] which interested him as a zoologist, such as parts of the human anatomy and [illegible] animals and birds.

[illegible] noticed the connection in his Allgemeines Tasmanisch-Deutches Wörterbuch (1952) that the vocabulary was from a North Eastern dialect (§ 5.4.2.1), and I have no hesitation in stating my agreement with that observation. However, Plomley states (*Wordlist*: 14):

> 'There is no evidence to link this region but to eastern Tasmania, so either Gaimard was mistaken as to the tribal origin of the woman, or Port Dalrymple was the place from which the sealers had come.

But Plomley's comments are mistaken, and merely reflect his poor understanding of the Palawa [illegible] (§ 6.4.7). Georgetown, like the other European settlements in Tasmania, presumably attracted local Palawa both as visitors and as fringe dwellers. It is well inside the territories of the North Eastern speakers. A number of Palawa women joined sealers willingly, and there is no reason why this woman should not have cast in her lot with a visiting sealing party. Plomley's surmise that the party of sealers may have come from Port Dalrymple is improbable, and in any event irrelevant. It is unlikely because the Government would not have countenanced the use of George Town or York Town as a permanent base for sealers. Provisions of all sorts were for long periods in short supply. The sealers were mostly a motley lot of men of many nationalities, many of them defaulters under their ship's articles, escaped convicts, and other renegades from society. Their recorded settlements and bases were on islands well offshore the Tasmanian mainland, and apart from powder and shot, and similar items of European manufacture, they were self-sufficient. Their catch was taken straight to the Sydney market, and to off load skins, feathers and oil at George Town would have made no sense.

§ 6.1.11 Jorgenson

The formal education of Jorgen Jorgenson (1780-1841) ended when at age 14 he was articled to an English ship's master. He was a Dane, but spent most of his adult life in English-speaking countries, and when at sea on English ships. His years as a mariner also gave him an acquaintance with the Baltic languages, and presumably German as well. He rose to be a commander of a Danish naval vessel, and at one time was the ruler of Iceland (Pike 1967). It can be surmised that he received a broad practical education and that he acquired a fluency not only in Danish and English, but also at least a working knowledge of other European languages. He would have been well aware of the role performed in the Danish and English languages by grammatical inflections, and even more aware of the much more heavily inflected nature of the German and Baltic

languages. His failure to note grammatical affixes in the Palawa languages thus assumes perhaps, a critical importance (see § 7.2).

He was a member of Collin's party in 1804, but his first sojourn in Van Diemen's Land ended in 1805. His close contact with the Palawa only came after he was transported to Van Diemen's Land in 1826 following a number of convictions for petty felonies. He was employed by the Van Diemen's Land Company as a surveyor in north western and central Tasmania, and for a time lived at Stanley. He probably had further contact with the Palawa when living in the Southern Midlands, and perhaps was also a member of roving parties employed to curb Palawa depredations. Later, as a resident of Hobart, he would appear to have availed himself, until his death, of opportunities to record words from Eastern and (south) Eastern speech (*Wordlist*: 15-17). In terms of the size of his vocabulary he ranks second after George Augustus Robinson. The nature of the words recorded was eclectic and wide ranging. A comparison of his vocabulary with the vocabularies of Robinson and Sterling suggests that the quality of his transcriptions was good. He did not mark syllabic boundaries, nor stress. In other respects it also falls short of the standards set by Sterling (§ 6.1.14), but in phonological terms was almost on a par with those of the Robinsons (§§ 6.1.16 & 6.1.17), and clearly far superior to those of Milligan (§ 6.1.13) and most, if not all, of the minor recorders.

As noted by Plomley (*Wordlist*: 15-17), Jorgenson's authorship of the various vocabularies attributed to him has not been fully established. Jorgenson himself claimed to have prepared some of the vocabularies otherwise ostensibly attributable to him from an examination of documents in the office of the Colonial Secretary. But for the reasons given by Plomley it seems safe to attribute authorship by him of all words ostensibly transcribed by him, with the exception of the words asterisked in the 'Jorgenson' vocabularies. These were attributed by Jorgenson himself to Dove (Plomley 1976: 16). Comparative analysis confirms Plomley's surmise. Jorgenson recorded five sentences, but when and where is not known. The two longer sentences are stilted, which may indicate that they are not as such grammatical entities, but merely random phrases which progressively conveyed a series of the speaker's recollections. Alternatively as will be discussed in Chapter 7, it may evidence an absence in Palawa of verbs, and what was, when compared with the Pama-Nyungan languages, a very undeveloped syntax. Thus if any of the sentences include words which incorporate grammatical affixes, the affixes have not been identified.

There is no extant information as to the spelling conventions adopted by Jorgenson, but he would appear to have basically adopted the same spelling conventions as his English speaking contemporaries.

§ 6.1.12 M'Geary

Alexander M'Geary (c.1794-?) was a convict who was transported to Tasmania in 1817. Nothing is known as to his education. His court of conviction (Derby, UK) and his employment on farm work whilst a convict suggests that he had little in the way of a formal education, and that he did not have a trade. He was member of Robinson's party in 1830, but had other contacts with Tasmanian Aborigines both before and afterwards. In 1836 John Lhotsky, a naturalist born in Poland, visited Tasmania. He subsequently published a vocabulary comprising 122 words which he obtained from M'Geary (Lhotsky 1839; *Wordlist*: 17-18). There is no reason to doubt that M'Geary was the original recorder of the vocabulary. The vocabulary sometimes, but only rarely, records the geographical provenance of the words transcribed. Whilst M'Geary was at times a member of Robinson's parties, and at other times worked as a bushman, it is otherwise clear that the bulk of the vocabulary is from Mara dialects. A wide range of words were recorded, with words for parts of the human anatomy and wildlife as the most common. There is no recorded information with respect to the spelling conventions adopted by him.

§ 6.1.13 Milligan

Joseph Milligan (1807-1884) was a Scotsman. He obtained the diploma of the Royal College of Surgeons of Edinburgh in 1829, and in 1830 was appointed surgeon to the Van Diemen's Land Company at Surrey Hills. He later received a number of senior Government appointments which included that of Superintendent and Medical Officer of the Aboriginals, a position which he held from 1843-1855. As such he visited both the Wybalenna and Oyster Cove establishments (*Wordlist*: 18-20). He held a number of posts outside the Government Service, was a skilled botanist and geologist, and clearly a broadly educated man. He had a high reputation both as a Government officer, and as a person. His paper delivered to the Royal Society (Milligan 1890) indicates a sound knowledge of English syntax. He is reputed to have had no language other than English. But his comments on the spelling conventions he himself adopted (1890: 12-13), suggest that he had some acquaintanceship with both French and with German (§ 5.2.2.1; Pike 1967: 230-231).

On his visits to Wybalenna he compiled an extensive vocabulary, and recorded a number of sentences and songs. Plomley states that in 1857 this collection was published as a parliamentary paper (1976: 18; Milligan 1957), and subsequently in 1859 it was republished by the Royal Society of Tasmania with some additional material (Milligan 1959). It was reprinted in 1890 (Milligan 1890). The vocabulary is wide ranging, and includes a number of place names and personal names.

As a preface to the Royal Society republication Milligan himself described the methods employed by him in recording Aboriginal words, many of the spelling conventions employed by him, and provided a number of general but useful comments on the Palawa languages. His basic method was to have each word repeated until he himself believed that he understood its correct pronunciation. Presumably this could have involved much repetition on both sides. Finally the word was submitted to a committee 'as it were' of several Aborigines 'when the corresponding word in their language, having been agreed upon by them, was entered.' (p.7). Some two or three years later the word was resubmitted to a similar committee, and if need be corrected (p.8). The reference is both to the pronunciation of the words, and their meaning as originally glossed. Milligan would appear to have been well aware of the more usual traps in attempting to translate the words of a people with a different culture, of the tabooing of words and names, of the use of gestures to supplement the spoken word, and of the use of abbreviated words. His general observations indicate that he detected (but did not understood the significance of the fact) that many sounds heard by him were allophones of other sounds. On page 10 he states, again as a general observation, that the Palawa words incorporated numerous affixes which for him had no semantic or other role.

For reasons that are not understood, Plomley had an uncritical admiration of George Augustus Robinson, and deprecated the work of Milligan. The latter point comes through very clearly in his criticisms of Milligan's glosses (*Wordlist*: 19-20). Note 6, headed *Comprehension* (p.20), provides several examples. One can not infer from glosses intended for the information of his fellow English speakers that Milligan used the same words when communicating with his Aboriginal informants. Nevertheless a comparison of Milligan's vocabulary with those of the Robinsons, Sterling and Jorgenson leaves one in little doubt that his transcriptions are markedly inferior in a number of respects. For instance syllabic boundaries were rarely indicated, and stressing and accenting rarely if ever marked. Close examination seems to reveal inconsistencies in the application of the spelling conventions stated by him. It seems clear that Milligan did not

have as good 'an ear' as the Robinsons, Jorgenson and Sterling in particular. A full discussion of the Milligan transcriptions is provided in § 7.5.1 through to and including § 7.5.1.4.

§ 6.1.14 Norman / Sterling

James Norman (?-1868) was an Anglican priest who arrived in Tasmania in 1827, and was appointed chaplain at Sorell in 1832, where he resided until the year before his death (Plomley 1976: 24). A manuscript held by the Royal Society of Tasmania was provided by James Erskine Calder the Government surveyor, and stated by Calder to have been assembled by Norman. Plomley's research of the original manuscript represents a fine piece of detective work insofar as he traces the authorship of the 'Norman' vocabulary back not to James Norman, but to Charles Sterling (c1807-1840), an assigned convict who acted as George Augustus Robinson's clerk (*Wordlist*: 25). Plomley also separates the 'Norman' manuscript from another manuscript vocabulary also transcribed by Sterling, but with corrections in the hand of Robinson. My own examination of the words in this second vocabulary satisfies me that the words are from different Tasmanian language groups, including both Northern (Nara) and North Eastern (Mara) speech. Very plausibly Plomley attributes authorship of this vocabulary to Robinson. Sterling was Robinson's clerk from 1829 until 1832, and tragically for the recording of the Palawa languages was found drowned in the Derwent River in 1840.

Sterling did not record the geographical provenance or dialect of any of the words recorded by him, but comparative analysis of his vocabulary with apparent cognates leaves little doubt that most of the words are from (south) Eastern speech with perhaps just a few from Eastern speech. There is so little overlap with the Robinson vocabularies that one suspects that the 'Norman' vocabulary records words obtained by Sterling personally in addition to the words he was copying for Robinson. He used a thoroughly rigorous and consistent orthography, as well as using the same system of stress marks as did Robinson. The care taken by Sterling can be measured by comparing his transcriptions with the transcriptions of the same words by other recorders. He had no peer in this respect. Detailed transcriptions of this nature would have been an impossible task for Norman, and also for Sterling if he had been obtaining the words at second hand, and had not received the benefit of a tuition provided by Robinson as his employer.

§ 6.1.15 ROBERTS

Robert Andrew Roberts (? - ?) was a settler who arrived in Tasmania in 1823 and lived on Bruny Island until the early 1830s. He would appear to have been on good terms with the local Aborigines. He would appear to have prepared a vocabulary which was more extensive than the extant list of 55 words attributed to him (Plomley 1976: 20-21). There is no reason to think that his vocabulary is not confined to (south) Eastern words. There is no recorded information with respect to the spelling conventions adopted by him.

§ 6.1.16 Charles Robinson

Charles Robinson (c1817-?) was a son of George Augustus Robinson. He arrived in Tasmania with his mother in 1826. His educational background is unknown, but as a person who spent most of his childhood in Tasmania was in terms of a formal education probably poor. According to Plomley (1976: 21)he only accompanied his father as far as Port Davey on the first expedition in 1830, in December 1832 on the expedition to Macquarie Harbour, and on the last expedition again to the west coast 1833-1834. Yet as his biographer in *Australian Dictionary of Biography* (Pike 1967), Plomley states that he accompanied his father on all his expeditions. He lived at Wybalenna when his father was commandant, and would appear to have been on good terms with the Aborigines there (§ 6.1.8).

Charles Robinson identified the geographical provenance of most of the words recorded by him, and inasmuch as his vocabularies include words of the Ben Lomond 'tribe' and Port Sorell District, it seems clear that most, if not the whole, of his vocabularies were recorded at Wybalenna. He adopted his father's approach to the transcription of words in that he indicated syllabic boundaries by dots. It seems safe to assume that the spelling conventions adopted were those of his father.

Plomley's trenchant criticisms of Charles Robinson as a recorder are mostly unwarranted. Certainly the vocabularies do not appear to have been compiled in a systematic way, but perhaps like his father he was recording words collected opportunistically and/or for his own purposes, and not systematically or for the benefit of posterity. Criticism (b) to the effect that '(in) a number of cases the word appears to be wholly or partly a corruption of English (perhaps the "pidgin" used by ... the natives' is incorrect. The words recorded were Kaurna words, a fact discovered by Robert Amery (1996; § 6.3.10). Comparative analysis of the Robinson transcriptions does not indicate that Charles Robinson's transcriptions were markedly inferior to those of his father.

Plomley's criticisms emphasise his (Plomley's) own lack of knowledge of linguistics, and of his understanding of the Palawa languages in particular (§ 6.4.7).

§ 6.1.17 George Augustus Robinson

The youth of George Augustus Robinson (1791-1866) was probably spent in London. He had little formal education, but educated himself informally by reading widely. He was employed for some years in the Engineer's Department at Chatham, and was connected with, and perhaps superintended, the building of some of the Martello towers on England's east coast. He arrived in Tasmania in 1824 (Pike 1967, vol.2). Other entries in the biography, as do the references in his journals to the sufferings of the Palawa from pulmonary disease (Plomley 1966), show him to have been a compassionate man of a serious and religious disposition, having wide interests, with above average literacy, and a successful businessman. His twentieth and twenty-first century detractors have sought to besmirch his abilities and character by innuendo and unsubstantiated assertions, but have provided little or nothing in the way of evidence (Rae-Ellis 1981: 4-7; 6 and 82; Windschuttle 2002: 199-202). Not only Rae-Ellis and Windschuttle, but almost everyone who has discussed Robinson's work with the Tasmanian Aborigines has commented on his character. Their comments have usually betrayed their prejudices, whether favourable or otherwise. There have been numerous unsupported suggestions that he was only partly literate and of below average mental capacity. The fact that he kept a diary of his travels under extremely difficult conditions, and the prose used in the diaries and his other writings, belie most of these suggestions. On the other hand suggestions that he then or later became a vain man and venal may have more truth, but remain subjective judgements (Windschuttle 2002: 208 and following) Adverse judgements of this nature should not readily be accepted in the twenty-first century with respect to an undoubtedly sincere nineteenth-century evangelical Anglican struggling to support a large family in a colonial economy in which government patronage was an important part of the system. Importantly the criticisms cannot be used to judge the quality of his transcriptions of Palawa words, nor his observations of Palawa culture. The quality of his transcriptions can only be judged in the light of a comprehensive study of Palawa phonology, a matter undertaken in chapter 7.

Successful government rationing of the clan at Bruny Island induced Governor Arthur to appoint an administrator, and Robinson was the person chosen, taking up his duties in March 1829. What contact he had with Aborigines before then is unknown. As administrator he actively and zealously pursued a policy of acquainting himself with the local language and customs. Perhaps

encouraged by his success in relating to the Aborigines, he was by June suggesting an attempt to conciliate and bring in the 'tribal' Aborigines of western Tasmania. In January 1830 with Arthur's approval and financial support he commenced the first of his expeditions. The later expeditions were used successfully to bring in most of the remaining 'tribal' Aborigines prior to their removal to Flinders Island. The expeditions continued until August 1934.

As noted, he kept a diary of his expeditions and made copious notes, apparently for his own purposes, and not with any view to early publication. These were not recovered until 1939, nor published in any form until 1966. The publisher and editor of the diary was Plomley (1966). In appendices to that work and ot her treatises which followed Plomley collected and published all the Palawa personal names, clan names and place names recorded by Robinson. In *Wordlist* he published the large number of ordinary words recorded by Robinson, in effect over 50 per cent of the total Palawa vocabulary, that is more than 4,500 words. (Pike 1967 vol.2; Plomley 1966; Plomley 1976; Plomley 1992; Plomley 1994).

Robinson claimed that he was fluent in four Aboriginal languages, but this was probably an exaggeration. It is not unlikely that he developed a form of pidgin speech using a knowledge of words in the Bruny Island dialect which became extensive enough to enable him to converse fairly readily with (south) Eastern speakers. As his knowledge of the dialects increased, the mixed Nara/Mara vocabulary of the Bruny Island clan would have assisted communication with both Mara and Nara speakers. However, reading between the lines of his journals it seems that he relied on interpreters when travelling in western and north western Tasmania. It has been suggested that he had no understanding of Palawa syntax (Crowley 1993: 59 and following; Crowley & Dixon 1981: 405). But in the absence of any knowledge on their part with respect to Palawa syntax, their comments are mere conjecture. They also formed the opinion that Robinson's transcriptions were 'very poor' (1981: 405). That view would appear to have been formed on the basis of his apparent failure to transcribe the dorso-velar nasal in word-initial position, in words transcribed by Milligan with such a nasal. But if so, Robinson shared the inability with his son, Jorgenson, and in the case of many words, with Milligan himself. The words for *cockatoo* (*Wordlist*: 142-143) sublisted under <nearipah>, <erriba> and <narrah> are instructive in this respect. The apparent failure probably tells us much more about variations in the Palawa articulation of the sound than it does about Robinson's abilities (§§ 7.5.1 ans 7.6.1.1). Plomley (1976: 23) and some others have assumed that Robinson did not refer back to his notes, and thus used different spellings, and/or that he was simply careless. But again this is nothing more than conjecture triggered by an unexpectedly high variety in the transcriptions of words for

the same objects and phenomena. Both Milligan's comments (1890: 9), and comparative analysis make all such views untenable (Ch.7). Robinson's recording of stress marks indicates an attention to detail emulated at the time only by Sterling (§ 6.1.14). Furthermore, his practice of noting alternative pronunciations, and at times his correcting of earlier transcriptions, belies the criticism. Significantly, notwithstanding the large volume of his recordings, no obvious inconsistencies have been identified. It is entirely reasonable to assume that a settled group of identifiable and internally consistent spelling conventions was adopted by Robinson in his transcriptions, and that the same conventions were adopted and applied by Sterling and Charles Robinson with an equal consistency.

Some of Plomley's criticisms would appear to have been based on his own ignorance of the fact that in Palawa voiced and voiceless stops were allophones of each other (§ 7.10); and that a large number of other sounds which are phonemes in English were in many contexts allophones in Palawa (§§ 7.6.2, 7.6.2.1.2, 7.6.3, 7.6.3.4, 7.6.3.5, 7.6.4, 7.6.8.1, 7.7.1 & 7.8.4). Neither he nor other critics including Crowley and Dixon, seem to have absorbed Milligan's comments with respect to the 'laxity and carelessness' of Palawa pronunciation (Milligan 1890: 9). If so they make no reference to Milligan's observations, and as discussed in chapter 7 as appropriate, would appear to have been unconscious of the significance of the observations. Nor would they appear to have taken into account the paucity of information with respect to the geographical provenance of many words, and the fact that the identity of the informant was only rarely noted. Many slightly differently recorded, albeit apparently cognate words, may have come from different dialects. Finally on the point, the fact that consonants in medial and final position were not always contrastive, and vowels rarely so in whatever position (Ch.7), is a matter which none of the persons referred to would appear to have appreciated. All these facts may well have contributed to some of the assessments made of both the Robinsons' transcriptions.

§ 6.1.18 Scott

Thomas Scott (1800-1855) was a Scotsman who arrived in Tasmania in 1820. He would appear to have had a good education that included professional training as a surveyor. He served the Tasmanian Government as a surveyor, and in other responsible capacities. As a surveyor and explorer he would appear to have had contact with the Palawa in various regions, and his friendly relations with the Aborigines on Bruny Island south to South Cape is on record (Pike 1967: vol.2)

His vocabulary of 40 words, though short, indicates an unusually perceptive interest in Aboriginal culture. Thus his translations of words for small stone artefacts evidence recognition by him that some of them were used to produce fire, as well as serving as cutting tools. There is no recorded information as to the spelling conventions used by him.

§ 6.1.19 General Observations with respect to Palawa Articulation

Plomley has collected a number of general comments by explorers and colonists with respect to the Palawa languages (1976: 27-31). The relevance of those comments may or may not be obvious at this stage, but in connection with a number of matters discussed in Chapter 7 and elsewhere their relevance will become increasingly important. For comparative purposes it is thus convenient to place all the comments in one place. I am almost totally reliant on Plomley for most of these quotations, and because his bibliography does not always provide the relevant citations can only refer readers of the thesis to *Wordlist*. However, the meticulous assiduity with which Plomley approached his recording of the Palawa lexicons was of the highest order.

Marion du Fresne of of Eastern speech:

> Their language sounded to us very harsh: they seemed to draw their words from the bottom of the throat.

William Anderson of (south) Eastern speech:

> Their pronunciation is not disagreeable, but rather quick.

William Bligh of (south) Eastern speech:

> ... like the cackling of geese .... A prodigious chattering in their speech ...

Nicolas Baudin of Mara speech:

> We said various words to them, which they repeated very clearly, and I was amazed, even, at the small amount of trouble they had. However, any words in which there were "R"s and "S"s were not so easy for them.
>
> They all repeated the words we said to them, but one of them swallowed his "T"s.
> This people's language is gentle, if a little gutteral. They speak very quickly and do not articulate very clearly.
>
> We pronounced various words which they repeated quite distinctly and I was even surprised how little trouble it caused them. However, words with an R or an S were not as easy for them.

George Augustus Robinson of Mara speech;

> The eastern native is the most indistinct or gutteral of any natives I visited.
> Some said one thing, some another, but as the natives find it difficult to pronounce the "s", the whole appeared to say instead of "good health" "go to hell", and in conclusion "go to hell all of you".

Henry Melville (1799-1873) newspaper proprietor, a resident of Hobart 1827-39 and New Norfolk 1839-49:

> What their language is, is not much known, but they have been noticed to sound the letter R, with a rough deep emphasis, particularly when excited by anger or otherwise, and that upon these occasions also, they use the word "werr, werr" very vehemently.

John Henry Cox (Bligh's expedition) of (south) Eastern speech:

> The party of natives whom they met "appeared to be verymerry, laughing and mimicking our actions, and frequently repeating the words warra, warra, wai.

Richard Henry Davies (c1807-87) mariner, arrived in Tasmania in 1831, resided in both Hobart and Westbury, and visited Wybalenna several times as a ship's master:

> Their language is very soft and liquid, ending, I think without exception, in vowels ...
>
> The dialects are numerous, and the language i n different parts of the island to be wholly different. ..... The aborigines from the westward, and those from the eastward, did not at first understand each other, when brought to Flinders' Island ..... but they afterwards, in common with the whites used a kind of lingua franca.
>
> The aborigines shew great facility in attaining the pronunciation even of English words, dissimilar as that language is to their own; they cannot, however,pronounce the hard letters , as in d and s; doctor they pronounce togata, or tokata; sugar, tugana; tea, tana.

Joseph Milligan:

> The language, when spoken by the natives, was rendered embarrassing by the frequent alliteration of vowels and other startling abbreviations, as well as by the apposition of the incidental increment indifferently before or after the radical or essential constituent of words.
>
> To defects in orthoepy the aborigines added shortcomings in syntax, for they observed no settled order or arrangement of words in the construction of their sentences, but conveyed in a supplementary fashion by tone, manner, and gesture those modifications of meaning which we express by mood, tense, number etc.

§ 6.2 Other Nineteenth and early Twentieth-century Materials

§ 6.2.1 Collections of Vocabularies, Sentences, and Songs

Commencing in the last quarter of the nineteenth century, and continuing in the twentieth century, a number of interested laymen and scholars collected at second hand and published vocabularies and other linguistic materials. These included H. de Charency (1880: 3-56); EM Curr (1887); H. Ling Roth (1890); JE Calder (1901); Fr W. Schmidt (c1912-c1919, published in 1952); F. Hestermann (1936: 1-57) and NJB Plomley (Plomley 1966; *Wordlist*; Plomley 1991; Plomley 1994; Plomley (no.4); Crowley & Dixon 1981: 398).

Subject to the exceptions noted in § 6.4.7, Plomley's works provide a comprehensive collection of the known materials. In addition to *Wordlist*, Plomley published what Robinson believed to be the Aboriginal personal names of the Aborigines referred to by Robinson in his diaries and notes

(Plomley 1966: Appendix 6). The personal names have not yet been made the subject of an in depth investigation, and will not be analysed in this thesis. But it is clear that many of them are geographical appellations of the type 'Hobartian', 'Sandy Bayite' etc. Subject to the recovery of further place names as a result of further studies of the clan names and personal names, only six omissions have been identified in what would otherwise appear to be a complete list of all known Palawa place names (1994). Insofar as they are known, Plomley also published a list and other material with respect to the Palawa clan names (1992). Revised lists of these names and a full discussion of their etymology and other relevant matters will be deferred to a later thesis.

The Language Unit of the Tasmanian Aboriginal Centre claims (Alexander 2005: 2) that it has recovered words from the descendants of sealers and Aboriginal women, many of whom still live on Cape Barren Island, Clarke Island and other islands in the Furneaux Group. The Unit has not published a list of the words recovered, nor responded to enquiries with respect to the words, nor withrespect to its research more generally.

§ 6.2.2 Wilkinson

Thomas Wilkinson was a catechist at Wybalenna for a few months in 1833. Translations of much of the first three chapters of Genesis claimed by Wilkinson to be his own work, were preserved in a paper delivered by James Backhouse Walker to the Royal Society of Tasmania, reproduced in a collection of papers delivered by him between 1888 and 1899 (Walker 1973) and reproduced by Plomley in *Wordlist* (p.43). There is another copy in a letter from Wilkinson to the Governor. Only the paper shows stress marks, and the spelling conventions used are different in the two versions. This suggests that the Walker version was amended either by Walker himself, or at his suggestion. Wilkinson would have been in contact with both the Robinsons at the time the translation was prepared. Whilst they may have provided him with some of the Palawa words used, the spelling conventions do not match those used by the Robinsons. Plomley states (*Wordlist*: 43) that the translation is in the language of the Ben Lomond 'tribe' but this is plainly wrong. The Palawa words incorporated are from a number of languages, and some are in fact otherwise unrecorded. The word order follows the English word order of the Bible. The suffix <na> excepted, no suffixes which might qualify as grammatical inflections were affixed to any of the words (cf. §7.2). Some words are English words, presumably for want of knowledge on Wilkinson's part of a suitable Palawa word. No valid inferences with respect to Palawa morphology or syntax can be deduced from the translations.

§ 6.2.3 Fanny Cochrane Smith

Fanny Cochrane Smith (1835-1903) was born on Flinders Island to a Palawa woman. From her mother or others she learnt some Palawa songs. About 1900 the Royal Society of Tasmania recorded on phonographs a number of songs and sentences sung and spoken by her, and transcribed the words, together with a translation. The quality of the phonographs was probably initially poor, and became almost completely corrupted when the drums on which the songs were recorded were broken. It is almost impossible to make out the words spoken. Comparison with the transcript provides some information with respect to the stressing of syllables, and indicates that the song was from a Mara dialect (Longman 1960: 79-86).

§ 6.2.4 The Australian Museum

A publication of the Australian Museum (McCarthy 1963) lists some Palawa words adopted by New South Wales Aborigines; viz <eleebana> glossed as *beauty,* <nairana> glossed as *eagle,* and <bubialla> noted as 'a Tasmanian native name for the Sydney Golden Wattle'. The publication seeks to attribute all the New South Wales words listed to the lexicons of named NSW tribes. <eleebana> and <nairana> have no attribution, but are listed in *Wordlist.* Speculatively the words were ported to New South Wales by New South Wales Aborigines employed from time to time in Tasmania as trackers (Horton 1994: 720).

§ 6.3 Twentieth-Century Recoveries

It is not unreasonable to conclude that the only fluent speakers of the Palawa languages were those Tasmanian Aborigines who had been reared in the clans. There is no evidence, and little probability, that any children of mixed descent had any language other than English as their mother tongue. With the death in 1888 on Kangaroo Island of the last Tasmanian Aborigine of full Aboriginal descent (Ryan 1981: 220), it would appear that any ability to recover the languages as living spoken languages was finally lost. At the beginning of the twentieth century a generation of persons of mixed descent were alive who had had contact with Palawa speakers. Nearly if not all of these persons were the descendants of Aboriginal women who had lived in the sealing communities. There is no evidence that any of these persons could speak a Palawa language, but some of them remembered songs, the occasional sentence, and a number of Palawa words. Their descendants in turn learnt and passed on versions of what they had heard. During the nineteenth century and well into the twentieth-century communities living on Cape Barren Island and Clarke Island in the Furneaux Group were rather isolated, and developed their own English

dialect. During the twentieth century, contact was made with these persons by Westlake (§ 6.3.1), Meston (§ 6.3.2), Tindale (§ 6.3.3), and Crowley (§ 6.3.4), in an effort to retrieve further linguistic material including, hopefully, Palawa phonology. Somewhat similar comments apply to Kangaroo Island where the sealer's women included Tasmanian Aboriginal women (Crowley 1993: 67).

§ 6.3.1 Westlake

Ernest Westlake was an English geologist who arrived in Tasmania in October 1908, and remained until June 1910. He had a keen and lifetime interest in human prehistory, and the purpose of his visit was to retrieve and preserve artefacts and information with respect to the Palawa. To this end he interviewed descendants of the Palawa and as well as Europeans who had had contact with the Aborigines who had lived at Wybalenna and Oyster Cove. Amongst his records were several short lists of Tasmanian words, some phrases, and excerpts from some songs. The names and racial origins of the persons who provided words were recorded by him. Westlake did not record the spelling conventions adopted by him (Plomley nd). As commented by Plomley, most of the words were from languages spoken along the eastern and north eastern coasts of Tasmania (*Wordlist*: 56-57).

§ 6.3.2 Meston

Archibald Lawrence Meston (1890-1951) was a schoolteacher who ended his professional career as Director of Education for Tasmania. Throughout much of his adult life he interested himself in the Palawa and their culture. Indeed he can be regarded as a pioneer in such studies. In November 1941 and May 1942 he interviewed Mary Jane Miller and recorded 19 words and a short corroboree song. Mrs. Miller was then 82, and the only surviving daughter of Fanny Cochrane Smith (§ 6.2.3). The quality of the data in terms of the form of the words, their pronunciation, and their glossing is doubtful. Plomley did not incorporate the vocabulary in the body of his thesaurus. It appears on page 58 of *Wordlist,* and the song on page 46. Meston does not appear to have recorded the spelling conventions adopted by him.

§ 6.3.3 Tindale

Norman Tindale was a person with a knowledge of modern phonetic systems. In the 1930s he made contact with descendants of Palawa women and sealers, and recorded several Palawa words and phrases, and one sentence. These have been published (Tindale 1937; Crowley & Dixon

1981: 397). He states that he detected an interdental stop in /'jaθa'ni:man/ = *wallaby* which he described as similar to that found in many mainland languages.

§ 6.3.4 Crowley

In 1972 Terry Crowley, a professional linguist, made audible sound recordings of five words, a complete sentence, and a fragment of a corroboree song provided by two granddaughters of Fanny Cochrane Smith (Crowley & Dixon 1981: 398). He noted that a word for meat incorporated a laminal interdental, but also noted that the general pronunciation of the words was almost wholly assimilated to English pronunciation.

§ 6.4 Nineteenth and Twentieth-Century Studies

§ 6.4.1 Műller

In 1885 Friedrich Műller published a brief analysis of grammatical features of Palawa (Műller 1885: 87-89). It adds nothing to Schmidt's analysis of Palawa grammar (§ 6.3.3).

§ 6.4.2 Ritz

Herman Ritz, a professional philologist, investigated the available Palawa materials early in the twentieth century, and delivered a paper to the Royal Society of Tasmania in 1909 (1910). Reading between the lines it seems clear that he believed in the Old Testament as literal truth, and accordingly that the Palawa and their languages were unique creations. The linguistic principles expounded by him with respect to Palawa phonology and associations attributed to the phonology are in the light of modem linguistic knowledge fanciful, a view taken by Capell (1968: 1), and shared by Crowley and Dixon (1981: 407). The paper provides no new data, and no linguistic analyses of any perceived value. As commented by Capell, Ritz's special theories with respect to roots and meanings vitiated his study.

§ 6.4.3 Schmidt

Fr Wilhelm Schmidt SJ is the only person who has published a comprehensive analysis of the Palawa languages. In the words of Arthur Capell, intended as praise and not as criticism, 'he extracted every ounce of fact that one can hope to extract from the existing documents – and perhaps a few more in excess!' (1968: 1). Schmidt completed his study in 1919, but in the hope

that further materials would be discovered left his work in manuscript form. His work entitled *Die tasmanichen Sprachen* (1952) included a Palawa-German dictionary, comprised 580 pages, but was not published until 1952, the year of his death.

As an Austrian, Schmidt was not subject to the vocational restrictions imposed on Jesuits in Germany by Wilhelm I and Otto Von Bismark, and maintained by Wilhelm II. But in any event he would appear by choice to have been able to devote himself to an academic life, rather than the pursuit of a pastoral or teaching vocation. He devoted much of his life to studies of the Australian Aboriginal languages, but had no contact with the Australian Aborigines, nor any access to phonological recordings (Capell 1968). He died before the results of the post-1970 investigations of living Australian Aboriginal languages were published. What follows has marginal relevance to the matters discussed in Chapter 7, but is of fundamental importance to any assessment of his views on morphological, grammatical, and semantic matters.

As noted earlier, he had a good knowledge of German, and a more than adequate acquaintance with the then rapidly expanding knowledge of the Indo-European languages, and their prehistory. Perhaps as a result, and not only because of his knowledge of Latin, he devoted much of his work to a search for word stems and lexical and grammatical suffixes of the type exemplified in Latin, classical Greek, and modern German. He interpreted a number of suffixes as case markers; but eschewed any similar conclusions with respect to the presence of affixes which might indicate number in nouns and pronouns, and in the case of verbs person, number, or tense. It is not my intention in the following remarks to impugn his professional competence, but he had a nineteenth-century fixation with such matters, illustrated firstly by his assumption that the names for many creatures, including insects, were derived from words for 'man', 'woman' and 'grandmother', and therefore in his view presumably evidenced mythological connections which could no longer be identified (1952: 168; § 249). In fact the resemblances were coincidental. Secondly, in his search for grammatical affixes, he attempted to establish a concordance in the suffixes of Palawa nouns with suffixes in Palawa adjectives (1952: 184 and following). Whether in Palawa there was a distinction between nouns and adjectives as parts of speech is a matter for future investigation, but inasmuch as there was no such concordance, he failed. A more serious criticism of his efforts is his attempts to fit Palawa words into the Indo-European word pattern of a word stem, followed by lexical and/or grammatical suffixes. His constantly reiterated attempts along these lines demonstrate his lack of understanding of the historical legacies in Palawa of proto Australian and late Pleistocene morphology, natural pronunciation shifts, and proto Australian and late Pleistocene semantic changes, all matters inevitably beyond anyone's

comprehension until Plomley collected and published his collation of Palawa place names (1994). He has not been alone in this respect, but to his credit, comprehensively demonstrated by his Palawa-German dictionary, he was in the field of semantic analysis not only far ahead of the nineteenth and twentieth-century commentators who preceded him, but every twentieth-century commentator who followed him.

§ 6.4.4 Worms

Fr EA Worms was a German linguist who published a short study of Palawa phonology based on the same limited materials as were available to Schmidt (1960). The study is in the nature of an overview, and does not canvass any matters not already and much more comprehensively and competently addressed by Schmidt.

§ 6.4.5 Capell

Arthur Capell was a self-trained linguist. Plomley provided him with a copy of the linguistic materials incorporated in Robinson's diaries and notes. As a result Capell prepared a short study of the Palawa languages (1968). The study insofar as it deals with Palawa phonology, is to much the same effect as that of Crowley and Dixon (1981). He also discusses a number of Schmidt's surmises with respect to other matters (p.3). In doing so he devotes considerable attention to syntax and morphology (1968: 3-7).

§ 6.4.6 O'Grady, Voegelin and Voegelin

GN O'Grady, CF Voegelin and FM Voegelin published some comments in their publication on world languages (O'Grady, Voegelin and Voegelin 1966). The comments reveal little about the depth of their investigation of the Palawa languages. Their conclusion was that there were only two languages, viz the language spoken by the 'tribe' classified by Jones as Northern (1974: 343--346), and the other being the language of the remaining populations. It is sufficient to state that their overall conclusions in these respects are contrary to the evidence presented by the Palawa lexicons, to Schmidt's comprehensively researched views, the research undertaken by Crowley and Dixon (§ 6.3.8), and inconsistent with much of the ethnographic evidence (§§ 4.3.1 to 4.3.5). Nevertheless their subdivisions of the Palawa languages broadly accord with the language groups proposed by Schmidt.

§ 6.4.7 Plomley

Plomley was an academic who had taught anatomy and embryology. As a result he brought a number of skills, and a remarkably disciplined approach to most of his research. He collated most of the known Palawa words in the ordinary lexicons, and all known songs and sentences in *Wordlist* and other publications (see the *Bibliography*). In a truly prodigious effort extending over more than a decade, he edited Robinson's diaries and notes, and extracted words and other materials which almost trebled the known lexicons. The identity of the European recorders and the geographical or other provenance of the words and names has been shown in these publications. He provided relevant information with respect to the background of each of the European recorders, and comments on the quality of the materials they collected. Subject to what follows, there is no reason to believe that Plomley has not collected and recorded almost every extant Palawa word, 'sentence', and song. Through no fault of his own he erroneously included a number of Kauma words (Amery: 1996: § 6.4.10; Table 6.4.10).

However, Plomley had no linguistic training, and at best a rudimentary understanding only of the way languages function and develop. Little or no credence can be given to his numerous linguistic interpretations. These include the inferences he draws from the number of apparent variations in the forms of words for particular objects or phenomena, and to his repeated claims that no associations with other words had been found, or that there were associations between particular words, as the case might be. For an example of the former, see his notes on words for *boy* (*Wordlist*: 175). For an example of the latter, see his comments on words for *wash* (pp. 185 & 463), and compare E: Gar <**mu.kin.ner**> = *wash* and – sn <**na'gūnnĕr**> = *wipe* with W: jj <**mocha**> = *water*. See also his rather naïve comments on words for parts of the human body under the heading *ANATOMY* (p.82), and as well compare those comments with the words for different internal organs as listed on pp. 124-125. As noted earlier some of his assessments of the quality and reliability of the European recorders are questionable, and at times defective (§§ 6.1.13 & 6.1.16). In his defence it is to be noted that much of his work was undertaken when he was in his late 70s and early 80s. There are, presumably as a result, a number of erroneous transcriptions. These criticisms are in general terms also advanced by Crowley and Dixon (1981: 399). Nevertheless very few ordinary words are missing from the thesaurus forming the body of *Wordlist* (Plomley 1976). Apparently he did not have access to the whole of Tindale's 1939 journal which lists some words recovered from persons of mixed descent living on Kangaroo Island; nor at the time *Wordlist* was prepared, a complete list of the words recorded by the D'Entrecasteaux expedition; nor to the recordings made by Crowley in 1972 (Crowley & Dixon

1981: 398 and 399). *Wordlist* suffers from some further defects in that words in the Westlake Papers (Plomley (nd)), in the sentences and songs transcribed in chapters 5 and 6 of *Wordlist*, in the Meston vocabulary (§ 6.3.2) have not been listed in the body of the thesaurus; nor words in some phrases recorded by Tindale (§ 6.3.3); transcripts of the songs sung by Fanny Cochrane Smith (§ 6.2.1); the words noted in Jorgenson's partly completed history (Plomley 1991); and all the Palawa words in Wilkinson's translation of Genesis (§ 6.2.2). Some omissions and transcription errors have been noted by Crowley and Dixon (1981: 399), and there were other mistakes of this type. I myself have detected a number of what must be errors in both his transcription and interpretation of Palawa words. As an example of the former he transcribed 'heal' for 'heat' as the glossing of E: mj <raick bourrack> (*Wordlist*: 240). As an example of the latter he placed E: mj <lienyack> and SE: mj <lineh> = *swell* under the heading *SEA* (*Wordlist*: 379), instead of under the heading *BOIL* (*Wordlist*: 171). The list of defects looks formidable, but in reality most are very minor defects, and detract very little from the immense value of his works and scholarship.

§ 6.4.8 Crowley and Dixon

In the 1970s in conjunction with the publication of a comprehensive overview of the Australian Aboriginal languages, Terry Crowley and RMW Dixon reviewed the available materials with respect to the Palawa languages (1981: 395 onwards). The materials reviewed also included the then newly published thesaurus of ordinary Palawa words in *Wordlist*, Crowley's own field research undertaken in 1972, and previously unpublished material collected by Tindale (1981: § 1.4). Material not readily available to them at the time included most of the Palawa place names and clan names. There were also the omissions and some of the errors in *Wordlist* noted earlier, but the mistaken inclusion of Kaurna words excepted (§ 6.3.10), none of these defects could significantly have affected their conclusions.

The detailed views formed by Crowley and Dixon with respect to the segments articulated in Palawa speech, and with respect to Palawa phonology will be made the subject of separate critiques in Chapter 7, and an overall assessment of the value their work is provided in § 7.12.1. Dixon (1980: *passim*) makes occasional references to aspects of the Palawa languages, usually in tentative terms. His observations and other comments will also be referred to as need be in Chapter 7.

§ 6.3.9 Taylor

In 1995 I published an etymological study of the Palawa place-names (1995). About the best that can be said of the publication is that it was on track with respect to the ultimate derivation of the names. It seemed clear then that most if not all of the names were derived from lexemes for geophysical features. Further work completely confirms this view, but an exposition of the evidence is beyond the scope of this thesis. My other more recent publications are listed in the Bibliography. With the exception of a refutation of some linguistic observations by Windschuttle (2004), they are all in need of revision.

§ 6.4.10 Amery

In 1993 Amery noticed what appeared to be a Kaurna word in *Wordlist*, and on investigating the matter further discovered that some 80 words ostensibly recorded as part of the Ben Lomond lexicon were Kaurna words. The principal transcriber was Charles Robinson, with a few words by George Augustus Robinson. Amery has published the results of his research into the matter (1996). The Kaurna words are listed below in Table 6.4.10. My own research into the Palawa lexicons confirms the correctness of Amery's conclusions.

As suggested by Amery the transcription of the words, can be compared with transcriptions of the same words by Teichelmann and Schürmann who early in the nineteenth century compiled a vocabulary of Kaurna words. Similar comments apply to the spelling conventions adopted by Gaimard. The asterisks and bolding identify a number of words which will be referred to when the quality of the Robinson transcriptions, and the spelling conventions adopted by them are discussed in Chapter 7.

Table 6.3.10 Kaurna Words

Palawa word	**Gloss**	**Kaurna word**	**Gloss**
yar.to.yar.to*	*baby*	yerthondi*	*to grow*
war.ke.ner	*no good*	wakkinna	*bad / wicked*
will.to	*hawk*	wilto	species of eagle
pul.you.ner	*black*	pulyonna	*black*
you.co	*whaleboat*	yoko	*ship*
tin.yare.ro*	*boy*	tinyara*	*boy / lad / youth*
cu.rer*	*not far off*	kura*	*near / not far off*
par.cul.lar*	*cold*	bakkadla	*hoar frost*
caw.y.he	*come*	kawai	*come*
me.yo.cow.y	*they are coming*	meyu kawai	*men coming*
yar.ter*	*country*	yerta*	*earth / land / country*

Table 6.3.10 Kaurna Words continues

Palawaword	Gloss	Kaurna word	Gloss
mu.rer.car.ne*	*cry* (weep)	murkandi	*to cry / weep / lament*
win.co.parl.der.re	*dead*	winko paltari (phrase)	*breath beaten out*
car.thud.er.lo*	*long way*	karradlo	*far off / long away*
mo.tar.ne*	*eat*	mutandi	*to eat*
i.char.le*	*father*	ngaityerli	*my father*
i.chic	*mother*	ngaityaii	*my mother*
i.chu.ung.er	*brother*	ngaityo yunga	*my brother*
i.chi.yuck.er.nu	*sister*	ngaityo yakkana	*my sister*
cull.ar	*fire*	gadla	*fire / fuel / wood*
i.thoc.mokcr.un.der.re*	*forget*	ngaityo mukandari* (phrase)	*forgot mine*
mun.car.re*	*girl*	mankarra*	*girl / young female*
i.tho	*give*	ngaityo	*mine*
none.ta	*go / go away*	nurnti*	*further / off / away*
munni	*good*	marni	*fat / rich / good*
mo.cu.ter	*hill*	mukurta	*mountain*
me.ther	*hot*	meda	*heat / hot / flame* etc.
wal.le	*house*	wodli	*hut / house*
you.ro.rin.ne*	*hunt*	yurrurendi**	*to creep / sneak / steal upon*
tow.roar.rer*	*big*	tauara*	*large / great / many / very*
cun.car.ne*	*laugh*	karnkendi*	*to laugh*
war.car.re*	*lost*	wakkari*	*lost / strayed*
par.rar.ne*	*make*	parrandi*	*to kindle / light / chew / marry*
war.rer*	*bandicoot*	wattewatte* ?	*small animal burrowing in the earth*
ter.ker*	*kangaroo*	tarka*	*large species of kangaroo*
nun.to.buke	*forester* (kangaroo)	nanto burka*	*old man kangaroo*
ung.kee	*doe forester*	ngangki	*female*
mo.ker mo.ker	*kangaroo rat*	(no identified counterpart)	
pil.tar*	*o'possum*	pilta	*o'possum*
wung-go	*ring tail*	wangko	*small o'possum*
me.you	*man*	meyu	*man*
pu.car*	*old man*	burka	*old / an adult / man*
pim.dim.me.yoe	*white man*	pindimeyu	*white man*
car.ca.rer*	*moon*	kakirra*	*moon*
ule.ta	*night*	ngulti	*night*
mul.lar.ner*	*no*	madlanna	*no / none / not*
wam.mer	*plain*	womma	*plain*
cut.ter	*shrub*	(no identified counterpart)	
i.tho	*me*	ngaityo	*my / mine*
yal.ler.me.yoe	*yound*	yerlimeyu	*father*
nin.co	*you*	ninko	*your*
we.rale.lar*	*be quick*	wirrilla*	*quickly / hastily / fast*
mun.yer	*rain*	manya	*cold / rainy*
car.re.car.re*	*get up*	karri karri*	*stand up!*
mu.rane.ne*	*run*	murrendi*	*to go / walk / travel*
cu.po.lar*	*salt water*	kapurlo*	*sea water*
un.dar.ne*	*very ill*	ngundandi	*to be ill / sick / feel pain*
muck.car.ne*	*sing*	makkandi	*to shake / quiver in the legs as in dancing*
ta.car.na*	*sit down*	tikkarna!*	*sit down*
won.ta.ne	*sleep*	wandendi	*to lie down*
tu.yu.ther	*little*	tukkutya	*small / little*
pue.yo	*smoke*	puiyo	*smoke*
wung.car.ne	*speak*	wanggandi	*to speak*

Table 6.3.10 Kaurna Words continues

Palawa word	Gloss	Kaurna word	Gloss
pull.le*	*star*	purle*	*star*
yul.to	*frog*	(no identified counterpart)	
war.rar.te	*tadpole*	(no identified counterpart)	
cow.we	*water*	kauwe	*water*
war*	*where is it?*	wa	*where?*
war.re*	*wind*	warri	*wind*
ar.mith.er	*black woman*	ngammaitya	*woman* (generally)
i.thoe.ar.mith.er*	*my wife*	ngaityo ngammaitya	*my woman*
nin.co.ar.mi.ther*	*your wife*	ninko ngammaitya	*your woman*
pie.ther.pull.ta	*old woman*	paityabulti	*old woman*
ar.rer*	*wood*	(ngarra ?*	*piece of burnt wood*
		(karra ?*	*redgum tree*

§ 6.4.11 Language Unit of the Tasmanian Aboriginal Centre

Insofar as the research of the Language Unit has been published, it appears in the Unit's description of *Palawa Kani*, the composite language compiled by the Unit (1998). This research was discussed in § 5.6.

§ 7 The European Orthographies Segments Phonemes and Allophones

§ 7.1 Overview

Within the context of any studies of the Palawa languages, the formation of Bass Strait c10,500 BCE finally and permanently separated the Palawa populations of Tasmania from the Aboriginal populations of the Australian mainland (§ 3.1.2). Both on a priori grounds and as a result of comparative analyses (§ 2.2.6), it can be asserted that thereafter the languages spoken on both sides of Bass Strait continued to develop, albeit not always in the same ways, nor over all at the same pace. This chapter will describe and identify the remarkable similarities in the phones articulated and co-incidently the phonemes contrasted in the nineteenth century south eastern Australian and Palawa languages, similarities which provide evidence for a genetic relationship between the languages. Grimm's Law and Verner's law, the development of the Francien dialect into standard French over the last millennium, and the Great English Vowel Shift, all highlight how quickly the articulation of segments can change, and how phonologies can develop and diverge. Dixon has discussed several possible developments in proto Australian (1980: § 7.5), developments that would appear to have both preceded and post-dated 10,500 BCE. A necessary preliminary will be an analysis of the orthographies used by the various European recorders to transcribe the sounds they believed they had identified.

It must be emphasised from the outset, that ostensible resemblances in the segments transcribed provide no warrant for assumptions that the articulation of Palawa segments can be automatically inferred from a comparison of those segments with the similarly transcribed segments in the twentieth century mainland Aboriginal languages. Whatever their shortcomings, the European recorders of the Palawa lexicons were attempting to record the sounds they heard, some of them familiar, others apparently familiar, and others again quite unfamiliar. Insofar as we are viewing their attempts to record Palawa utterances, their transcriptions and comments have presented us with raw data which may be difficult to interpret, but which in a number of respects is more authentic than the interpretation of sounds undertaken by linguists to fit phonetic representations. Such exercises when undertaken with adequate data can accurately identify segments and distinguish between phonemes and allophones. But as this chapter will demonstrate time and again, the Tasmanian data for such purposes falls far short of this. So for example there can be no warrant for automatically assuming that transcriptions of **<t/d>** by French speakers are to be equated with transcriptions of **<t/d>** by English speakers. Even assuming that their respective transcriptions of these stops

in (south) Eastern speech record the same sounds, one cannot assume that transcriptions of **[t/d]** in the words of other Palawa languages record identically articulated stops. Nor in any event whether the (south) Eastern speech stop was an apico-alveolar stop as it usually is in English, or a dental stop as it usually is in French (§ 7.6.3.3). Likewise, whilst the pronunciation of apico-alveolar stops in living Pama-Nyungan languages can suggest lines of investigation, there can be no warrant for assuming that the stops ostensibly transcribed in the various Palawa vocabularies were pronounced in the same way as they are by Pama-Nyungan speakers. Furthermore one should not assume without investigation, that early nineteenth-century English speakers articulated stops in all positions in the same way as do twenty-first century (Australian) English speakers. In fact one cannot, and must not assume, that the letters of the alphabet used by any particular English recorder of a Palawa vocabulary, always recorded the same segment as the same letter when transcribed by one of his contemporaries. The regional dialects of the British Isles varied even more in the early nineteenth century English than they do today, and in this respect variations in the articulation of rhotics provide a salutary lesson (§ 7.6.2.1).

Importantly English spelling conventions, particularly the representation of vowels, were even less settled than they are today. Furthermore, neither the English nor French alphabets cope adequately with either all the Palawa segments articulated, or all English and French segments. More importantly again, the ostensible identification of sounds as for example **<h>**, may at times have better reflected the expectations of their recorder than their actual articulation by a Palawa informant. Similar caveats apply to the identification of segments when the segment transcribed is best interpreted as merely one member in a set of allophones. Thus in certain contexts it is arguable that **<w>**, **<v>** and **<u>** transcribe approximants. But even when accepted as accurate transcriptions of the segments they ostensibly denote, they nevertheless evidence in those contexts the lenition of a rhotic, and are to be treated as allophones within a set of segments that included both approximants and stopped rhotics (§§ 7.6.2.1.2 and 7.6.2.1.3).

Very similar comments apply to the respective phonologies of the Pama-Nyungan and Palawa languages, but with much greater force. With respect to those consonants and semi-vowels that were contrastive, virtually the same segments were involved. But as this chapter will demonstrate, contrasting as a semantic device was very much less developed in the Palawa languages. As a general proposition it can be stated that consonants and semi-vowels in word-initial position were contrastive, but only very rarely in word-final position. In medial positions

consonants and semi-vowels were in certain contexts contrastive, at other times members of sets of allophones which as sets were contrastive, and at other times would appear to have had no semantic role whatsoever. With respect to vowels, contrasting would appear to have also played only a very small role. In a few words eclipsis of a consonant or semi-vowel in word initial-position left a vowel exposed, and this vowel was at times contrastive. Furthermore a case can be made for the recognition of a limited number of word elements as conventional lexemes, and in these lexemes the vowels were usually contrastive.

The matters already referred to will have indicated the fact that a full interpretation of Palawa phonology faces some very major difficulties. Conclusions can rarely be presented at the end of each subsection, partly because of these difficulties, partly because a final interpretation of points under discussion depends on a discussion of matters which are raised later in the chapter, and partly because a final interpretation will be aided by a knowledge of Palawa morphology and of Palawa semantic developments, topics which are outside the ambit of this thesis. Thus it will be impossible at this juncture to finally confirm in which contexts segments were phonemes without a discussion of the semantic changes which affected the Palawa languages. At the same time references to morphological and semantic matters cannot be avoided. Many transcriptions which ostensibly denote for example, a consonant cluster, in fact denote for example, a palatised consonant, and it is inherently unlikely that many palatised consonants were not, at least when first articulated, phonemes. Likewise whether or not a segment was a phoneme influenced, and at times dictated how it was articulated. To partly overcome the difficulties created by the necessarily fragmented nature of the discussion which follows, readers may find it useful to read § 7.12.2 in advance. The subsection provides a summation of the principal conclusions reached insofar as this chapter can advance matters, and can thus be used as an overview.

§ 7.1.1 Phonetic and Phonological Comparisons

It is convenient to commence a comparison of the respective phonologies with some observations of RMW Dixon:

> The languages of Australia are remarkably similar in their phonetics and phonology. (1980 : 125).

> What little we can reconstruct of the pronunciation of Tasmanian languages is not conclusive evidence as to their relationship with mainland languages. Their consonantal system was comparable to one of the simpler mainland languages, with perhaps four points of articulation for plosives and nasals ...

> There seems not to have been any distinction of voicing .... And there were no fricatives other than possibly *gh* or *h*. But there may have been an unusually high number of vowels in comparison with mainland languages, including perhaps a front rounded *ü* of the sort heard in French *du* or German *Mümchen* (1980: § 3.6 pp.70-71)

With respect to Tasmanian pronunciation, Dixon cites Capell (1968) and Wurm (1972: 168-174). Without wishing to appear unduly critical, the comments indicate little familiarity with either the Palawa lexicons; or with Schmidt's lengthy and detailed discussion of Palawa , and of its segments and phonology in particular (1952: 104-155). Crowley and Dixon discuss the Tasmanian phonology at greater length in their chapter on 'Tasmanian' (1981: § 2, pp. 404-415), but the discussion again reveals little familiarity with the Palawa languages; or with Schmidt's work. The views of Crowley and Dixon on Tasmanian phonology will be referred to frequently in this chapter. To be fair to them, many of the views they advance are expressed in appropriately tentative terms, and are at times heavily qualified. My criticisms, as well as my agreement with their views on a number of points, will be provided as those views arise for discussion. A general summation is provided in § 7.12.1.

In my view Capell (1968: 2) is the only writer who in English has provided any really useful commentary on Tasmanian phonology, and his statements whilst few, require little or no qualification. His remarks included the following:

> The presence of two series of stops, voiceless and voiced, is rare on the mainland of Australia ... It seems unlikely that that they existed in Tasmania.
>
> Schmidt posited a pharyngeal fricative ... The evidence seems to me quite insufficient. ..... it could just as well have been the velar fricative /γ/.
>
> One interesting point is the occurrence of /l/ and /r/ as phonemes, and these quite frequently in the initial position. Initial laterals and rolled consonants are somewhat rare in Australia, and many of the languages do not permit them at all.

As a general summary of the conclusions reached in this chapter, the Palawa would appear to have articulated all the consonants and semivowels articulated in the Woiwurrung and Warrnambool languages. Capell (1968: 2); and Schmidt (1952: 106) note that the sibilants were not articulated. Notwithstanding some transcriptions of <**s**> and <**z**>, their observation is basically correct (§ 7.6.4.4). A post-alveolar fricative [**tr/dr**] transcribed as <**tr/dr**> (§ 7.6.3.4), and the voiced fricative [**v**] were regularly articulated. The evidence suggests that [**tr/dr**] was contrastive (§ 7.6.4.3). In word-initial position [**v**] alternated with [**w**], and as a set of allophones were contrastive (§ 7.6.4.2). It was probably independently contrastive as a segment in initial position in following word elements. The unvoiced labio-dental fricative [**f**] was rarely

if ever articulated, and if articulated always as an allophone of **[p]** (§ 7.6.3.2). Similar comments apply to the palato-alveolar fricatives (§ 7.6.4.1). The various dental fricatives were rarely articulated, and were rarely contrasted with either each other, or with the apico-alveolar stops (§ 7.6.4.3). In Palawa, consonants and semivowels were contrastive in word-initial position. No generalisation can be advanced with respect to their positioning as the initial segment in following word elements (§ 7.6.8). Whilst rarely contrastive in final position, there were some exceptions. However, the semi-vowels were never contrastive in final position (§§ 7.7.1 and 7.7.2). As noted above, vowels were rarely contrastive except in word-initial position (§ 7.8.4). Arguably the vowels articulated were virtually confined to the articulation of pure vowels, and rarely included diphthongs. But the transcriptions of diphthongs are sometimes difficult to distinguish from vowel clusters (§§ 7.8.1, 7.8.1.1 and 7.8.1.2).

§ 7.1.1.1 Natural Pronunciation Shifts

It is well evidenced cross-linguistically that quite small changes in the physical articulation of a consonant or semi-consonant can produce similar sounds which are then perceived as different sounds by other speakers of the language. Subconsciously or otherwise, the differentiated sounds can then be contrasted as a means of refining and diversifying their lexicon. In other words, once articulation of the different sounds becomes sufficiently conventionalised, and their application sufficiently disciplined, the differentiated sounds become phonemes. Cross linguistically, a typical example was the seventeenth century articulation of the first segment in 'Bombay' as a sound which was articulated by Portuguese and English speakers, and probably as well by many Hindi speakers, as a voiced bilabial stop. Gradual, almost imperceptible changes in its articulation led to its approximation to the articulation of a bilabial nasal, another voiced segment. In the twenty-first century the progressive change was recognised, and the written name of the city updated to accord with its current pronunciation. As a result the city is now known as 'Mumbai'. In English, Portuguese, and Hindi **[b]** and **[m]** in word-initial position are typically contrasting phonemes. The same phonological changes are well evidenced in the south eastern Australian and Palawa lexicons.

Not all such changes crystalise as phonemes. Thus in Southern Bantu <naleli> = *star*, articulation of the second lateral is dentalised. Accordingly English speakers equate it with the English voiced apico-alveolar stop **[d]**. Dissimilation produced the same change in OE, producing *pool* and *pot*, originally as synonymous words. The second word became archaic and in its original sense was marginalised. As an archaic word it is preserved in English place

names. As a marginalised word the lateral and the stop were contrasted, and *pot* became a cavemeering term. Similar developments can be identified in Palawa, but only very rarely did segments in word-final position become contrastive.

The development, recognition, and conventionalisation of segments as phonemes in the different world languages did not proceed in uniform ways. In the Indo-European languages, whether a segment is voiced or unvoiced almost always has semantic consequences. It also usually has important semantic consequences as a medial segment, and less frequently as a final segment. English words such as *batter* and *patter,* as well as *bend* and *bent,* illustrate the point. It was otherwise in the south eastern Australian languages, where contrasts between voiced and unvoiced segments rarely occurred (Crowley and Dixon 1981: 408). If in fact there was such a development in Palawa, it would appear to have been confined to (south) Western speech articulations of the voiced dorso-velar consonant. If this observation is correct, it was a late, rare, and still incipient development. It is not a matter which can be pursued in this thesis. The Europeans who recorded the Palawa vocabularies were unaware of this lack of contrasting, and in their transcriptions distinguished voiced stops from unvoiced stops. As a corollary they were insensitive to the possibility that for example, lamino-dental nasals may have been articulated, and that they may have been phonemes which contrasted with the other nasals. Their lack of perception in these respects is understandable, but when translated into transcriptions of Palawa segments can mask the existence of phonemes, and in this sense be confusing.

Pronunciation shifts affected segments in word-initial position, the initial segments in following word elements, and medial and final consonants as segments in both words and word elements. The changes when they crystalised as phonemes triggered semantic changes. It is my belief that in the Palawa languages most segments in word-initial position evidence a semantic change, and only rarely a pronunciation shift. Comparative analysis can be used to demonstrate semantic changes, but semantic change as a topic in itself is better pursued in conjunction with expositions accompanied by etymological analyses. Accordingly, in this chapter I will only rarely discuss the possible relationship of ostensibly cognate words where the only or principal difference is the initial segment in the words.

§ 7.1.1.2 Lenition

Cross-linguistically, the articulation of unaccented segments tends to weaken (Hock: 1991: 80). Eventually this can so alter the articulation of a segment that it is identified as a different sound. The point has obvious application to the Palawa languages. But what is not always appreciated

is that a lenited segment may be identified in a different way by a person who has no great familiarity with a language that person is recording, from the way it is interpreted by a native speaker. Potentially the comment has an obvious application to the Palawa lexicons as recorded.

§ 7.1.1.3 Other Pronunciation Shifts

The development of phonemes involves the common acceptance of a limited range of articulations of a sound as a distinctive segment. The process is not dissimilar to the identification and naming of colours. But there are changes which have taken place in the articulation of segments which are the product of other factors. Those factors are well recognised cross-linguistically, and discussed in works such as Hock's *Principles of Historical Linguistics* (1991). The more important factors are referred to below.

Stress is a factor which can determine whether particular segments are or are not preserved, and/or the form in which they are ultimately preserved. Accenting is a phenomenon which is often associated with stressing, but which can operate independently. It too can affect the preservation and form of segments.

Lenition typically involves a 'relaxation' or 'weakening' of articulatory effort' (Hock 1991: 80). It too is often associated with stressing and accenting. In Palawa it typically affected dorso-velar nasals and rhotics as segments in final position (§§ 7.6.1.1 and 7.6.2.1). Coupled with perseverant and anticipatory assimilation as factors (see below), the recognition of lenited forms can alert the possibility that the segment ostensibly transcribed was once a different segment, and in certain contexts even a different segment to that transcribed. Thus the possibility that **<w>** may denote an approximant was referred to at the end of § 7.1. As a corollary, the former presence and loss of segments in initial position in following word elements, and comparisons with other words can then provide information as to the identity of a lost and/or replaced segment. Thus [**k/g**] as the initial segment in following word elements would appear to be only rarely a product of semantic assimilation. More commonly its presence evidences eclipsis of the original segment, followed by epenthetic alliteration which involved the final segment for the time being in the preceding word element (§ 7.6.8).

'Word-final environment is a position which is especially vulnerable to change. Most of the changes that affect it are of the weakening or loss variety ...' (Hock 1991: 80). The stress system that operated in Palawa (§ 7.9) resulted in the lenition and/or loss of segments in medial

and final position in word clements quite generally. Final devoicing was a major contributing factor in the production of these changes (Hock 1991: 80). But in Palawa devoicing was not confined to final segments. The evolution of post alveolar fricatives into alveolar stops and other segments provides an example (§ 7.6.3.4). Devoicing and/or dissimilation produced several phonological progressions, for example from **[tr] > [t/d]**; from **[dr] > [dj/tj] > [j]**; and from **[tr] > [r]**. Comparative analysis establishes that most words with a rhotic in initial position had a progenitor in which the initial segment was **[dr]** (§§ 7.6.2.1 and 7.6.4.3). Only in a few cases was the change to **[r]** triggered by a shift in the articulation of a bilabial semi-vowel (§ 7.6.2.1.1).

Palatalisation and labiovelarization were major factors in the development of Palawa words (§§ 7.6.7.1 and 7.6.7.2). The transcription of **<qu>** in a number of words usually provides clear evidence of labiovelarization, particularly when the words have apparent cognates in which the initial segment was preserved as **[k]**. However, it needs to be recognised that dissimilation of palatalised and labiovelarized stops occurred, and was not untypically followed by eclipsis. Thus dissimilation of **[kw]** led to words and word elements headed by **[w]** (§ 7.6.2.3), and as noted above, in a few cases a rhotic then replaced the semi-vowel. In other cases a dissimilated labiovelarised segment such as **[kw]** lenited to **[kr]** and **[kl]** (§§ 7.6.3.1, 7.6.3.2 and 7.6.7.2) Dissimilation of palatalised stops and laterals, followed by lenition of a resultant **[j]**, led to the articulation of a vowel.

In Palawa transcriptions of voiced segments can evidence the presence of stressing or accenting (§ 7.9). Cross-linguistically, a voiced stop in initial position can lead to vowel changes (Hock 1991: 21). It is probably no accident that the first vowel in E: mj <boatta> = *freestone* is a back vowel, and that in the genetically related words sublisted under <pee.you.rer> = *stone / rock* (*Wordlist*: 412) the first vowel is a front vowel. When palatalisation of apico-alveolar stops is recognised as a likely explanation of **<y>** as a transcription, it becomes apparent that consonant clusters in other words evidence dissimilation, and the words themselves, cognates. Dissimilation also often explains the presence of the vowel clusters so common in Palawa words (§ 7.8.1). That dissimilation was a factor in the alternation of rhotics with laterals and apico-alveolar stops is clear both cross-linguistically (Hock 1991: 107), and in Palawa. As medial and final segments, rhotics and laterals typically are allophones, and as initial segments typically phonemes. That voicing was a factor in their dissimilation is evidenced by the words for *hand* listed under <parl.le.ter.min.ner> (*Wordlist*: 86). A cursory examination of *Wordlist* reveals that when the Palawa words listed for a particular object or phenomenon include words

with an alveolar stop in initial position, there will very frequently be one or more other groups of comparable words with a lateral in initial position. The words for *stone* and for stone implements provide examples (pp.410-414).

Both anticipatory assimilation and perseverant assimilation are well evidenced cross-linguistically (Hock 1991: 61). Typically in Palawa these types of assimilation followed eclipsis of the segment in a juxtaposed word element, and the replacement of the lost segment by another segment which was a product of epenthetic alliteration (§ 7.6.8). This often led to the formation of geminate consonants, a common phenomenon in the Palawa lexicons (§ 7.6.6). The transcription of geminate consonants thus often masks the original derivation of segments in word elements.

§ 7.1.1.4 Semantic Changes

Quite long and disparate Palawa vocabularies were recorded in respect of the words used to identify a number of objects and phenomena. Thus in the words for and to do with *stone* (*Wordlist*: 410-414) the word-initial consonants range from <**b/p**> through <**h**>, <**j**>, <**k**>, <**l**>, <**m**>, <**n**>, <**t**>, <**tr**>, <**r**> and <**st**>. A cursory examination also reveals great disparities in the morphemic content of the words listed. There is no obvious genetic relationship between any of the word elements in <**boatta**>, <**heka**> and <**jaleap**>. The fact that there were five language groups cannot in itself explain these disparities. Ignoring the separately listed words for and to do with stone implements, the Eastern speech words alone include <**boatta**>, <**kughaweenya**>, <**lenicarpenny**>, <loelangta>, <loi.in.er>, <**n**arng.em.**n**er, <**p**ee.wer.rer>, <**t**eewar**t**ear>, <**tr**amu**tt**a> and <**t**en**d**eagh>. The disparate nature of the Palawa words for *stone* is not untypical of Palawa words for other common objects and other common phenomena. In terms of its lexicon, Warrnambool is a well recorded south eastern Australian language. There were a number of dialects (Blake 2000). Its words for *stone* comprised **/paapirr**anu/, **/p**irn **p**un**dj**il/, **/p**a**w**ut **k**uyiya**k**ut/, **/k**ara**r**a**tj**/, **/k**on**w**arram/, **/k**u**l**urra/, **/m**urrayi/, and /warr**w**a**t**urr/. Some of the Bunganditj and Warrnambool words suggest that up to four different progenitors may have been involved, and there are a Palawa words which would appear to have had the same progenitors. The recorded Bunganditj words for *stone* were **/k**u**t**ap/, **/m**a**rr**e/ and <**w**a-**w**urring-lo-er- **m**urray> (Blake nd). The variety in the Eastern speech words cannot be completely accounted for in terms of the pronunciation shifts and the other changes referred to in §§ 7.1.1.1, 7.1.1.2 and 7.1.1.3. Nor can internal semantic changes plausibly account for the variety, even if one allows for a high percentage of loan words from the other Palawa languages. On the

other hand, the first Palawa were migrants from mainland Australia (§ 4.2), and there is no reason to think that during the many millennia which followed there were no further migrations from focal areas which may have ranged as far west as Mount Gambier through to far eastern Victoria (§ 4.3). The Palawa words, clan names, and place names which ostensibly evidence different migrations cannot be systematically identified in this thesis, but in the case of the various words for *stone* attention can be drawn to some very plausible genetic connections. Attention is drawn to the bolded elements in SE: gar <**mir.rer.**mal.ler.ge> = *white quartz,* and an associated 'phrase' -: lh <**mughra** mallee> = *topaz.* In the Warrnambool language, **/murrayi/** and a number of apparent cognates were used as a general word for *stone,* and the other Warrnambool words already cited may evidence the marginalisation of earlier words for *stone.* The unbolded elements in the Palawa words can be compared with Warrnambool **/maatang/** = *white clay,* and to Bunganditj **/m'rri/** = *mud* and <**marmon**> = *white.* These words can be compared with NW: gar <**marn.drer**.ware> = *mud flat,* E: mj <pannogana **malletya**> = *whitish mud,* and E: gar <**mal.lit.yer**> = *white* (*Wordlist*: 325). In all these words the minor differences in the medial consonants are plausibly accounted for by dissimilation and/or alliteration, and in the case of <mu**gh**ra> by the preservation of a dorso-velar nasal as an aspirated dorso-velar stop (cf. <mar**n.**drer.ware>). The resemblances do not end with the words for *stone* as so far discussed. Ostensibly E: gar <ku**gh**aweenya> =*pebble* is a compound, doubly reduplicated word of completely different derivation. Once one allows for a shift in a dorso-velar nasal to a dorso-velar stop in the Palawa word, and to a nasal in Warrnambool /kon**n**warram/, the two words present as cognates. The resemblance becomes even closer, if **/rr/** as a tapped rhotic and medial segment in Pama-Nyungan words, is recognised as an alternation of what is transcribed in Palawa words as geminate consonants. The segments were all a product of eclipsis of the initial segment in the second word element of a folowing lexeme, followed by epenthetic alliteration. To continue the pursuit of common progenitors, it is suggested that in <kughawee**nya**> the bolded element evidences the preservation of a palatised dorso-velar nasal. Plausibly the **/m/** in /konwarra**m**/ evidences the lenition of the same dorso-velar nasal, followed by a shift from [**n**] to [**m**] as a product of accenting used to indicate the end of a word. Likewise there is no great difficulty in interpreting Palawa <**p**ee.**w**er.rer> and <**p**eoora> as apparent cognates of Warrnambool /**paapirr**anu/ and /**p**im **p**un**dj**il/, particularly if the Warrnambool words were doubly reduplicated words. Finally whilst /warr**w**a**t**urr/ also presents as a doubly reduplicated word with yet another progenitor, its resemblance to <**wutt**a / **w**ootta> as the suffixes in some Palawa words for *flint / knife* (*Wordlist*: 413) may not in semantic terms be merely co-incidental. Whilst prepared to illustrate the progressive

dissimilation and lenition of the post alveolar fricative in the south eastern Australian and Palawa languages, Tables 7.6.3.3(a) and 7.6.8 provide very comprehensive lists of apparent cognate words and names in the south eastern Australian and Palawa lexicons which further illustrate the points made. To recap, comparative analysis would appear to suggest wide genetic links between words and other lexemes in the Palawa lexicons with words and lexemes in the languages of the Mount Gambier-Warrnambool region, as well as words in the lexicons of languages in central and eastern Victoria. But to make any more detailed investigation of the links is beyond the scope of the thesis. The salient point, is that many Palawa lexemes may well have had mainland progenitors. If this is so, the search for progenitors in the Palawa lexicons cannot be confined to demonstrations of pronunciation shifts and other changes in lexemes as Tasmanian developments.

§ 7.2 Words and Word Elements

Speakers of living languages usually have little difficulty in distinguishing words with different meanings from each other as separate lexemes. Nor do many difficulties arise in spoken speech in distinguishing the word elements in multi-syllabic words from words as such. Difficulties are more likely to arise when individual words are recorded in written form, particularly if the words are compound words. But even then difficulties rarely arise. Much greater difficulties can arise for a person who is unfamiliar with another language when he attempts to record the vocabulary of the foreign language. In the case of Palawa the attempts to compile vocabularies would appear to have only rarely been accompanied by the recording of sentences and other continuous discourse. But in any event only Robinson had sufficient knowledge of the dialects to take advantage of the context a sentence can provide when it is necessary to distinguish between what may be a single word, or a phrase. As an example Milligan transcribed <**reekatenima**> as a single Eastern speech word for *knuckle,* and <**ria** puggana> as its (south) Eastern counterpart as a phrase. Comparison of the word and phrase with other words listed under *Hand* in *Wordlist* (pp.85-87) makes it clear that apparent cognates of the bolded word element in the examples were lexemes for *hand,* and that the remaining word elements comprise differently derived lexemes which distinguish the identified anatomical part as a knuckle. It is unlikely that Milligan had any conceptions as to the genesis of the different lexemes in the 'word' and 'phrase' recorded by him. It is also unlikely that any semantic consequences flowed from the articulation of <**reekatenima**> as a single word, and <**ria** puggana> as a phrase. Presumably Milligan's differing transcriptions resulted from differences in the length of the pause he detected in the articulation of the separate morphemes in each

formation. But a number of other Palawa transcriptions of this type raise questions as to whether the ostensible transcription of a phrase should be interpreted as a single word, or vice versa, and whether in some of these this entailed semantic consequences. Some particularly apt examples are provided in § 7.6.6. The table in that subsection and its accompanying discussion comprehensively illustrates Gaimard's inability to master the problems presented to him by the pause which typically accompanied the accenting of segments in final position in word elements (§§ 7.3.1 and 7.3.2). An uninformed reader of Gaimard's vocabulary might well assume that the second 'word' in the 'phrases' recorded by him were different lexemes. In fact they were the second and third limbs in reduplicated words. See the further discussion below.

Very typically in both English and Palawa, the morphemes incorporated in words as word stems are supplemented and semantically qualified by affixes. In English both lexical prefixes and lexical suffixes have major semantic roles (Crystal 1995: 198). Also in English, and more particularly in those Indo-European languages which have retained a synthetic grammar, other suffixes are employed as grammatical affixes (p.198). With respect to the Palawa languages, these aspects of language are more properly discussed as aspects of morphology, but it is appropriate to make some general observations as an aid to the understanding of Palawa words for comparative purposes.

There is no satisfactory evidence that in Palawa affixes had a grammatical role. Whilst the question as to whether there were any Palawa affixes which can be interpreted as grammatical affixes is beyond the scope of this thesis, there is in fact no evidence that any of the words listed in *Wordlist* as individual words incorporate grammatical affixes.

Comparative analysis reveals that the progenitors of many Palawa words were reduplicated words, and that in many multisyllabic Palawa words the word elements which follow the first word element preserve the second and third limbs (§§ 7.6.6 and 7.6.8). In compound Palawa words with two or more differently derived lexemes, it thus important to distinguish qualifiers and other lexical affixes from each other, and from the following limbs of reduplicated words. The Palawa words for *hand* exemplify the points made (*Wordlist*: 85-87). The words sublisted under <han.ner.me.kar.len.ner> and <han.ner.min.ner> present as doubly reduplicated words. On the other hand comparative analysis indicates that several words listed under <ree> and *Fist* respectively, are compound words in which elements <lia> as a suffix is a qualifier, and <mana>, <mutha> and <mutta> as suffixes are items. In <drar.bu.ric>, <rabalga> and most of

the words sublisted under <treen.ner>, the progenitor was a single lexeme. The progenitor was a reduplicated word.

A number of Palawa transcriptions leaves open whether the utterance transcribed was a compound word, or a phrase. Compound words arise in a number of different ways (Crystal 1995: 128-131). The remainder of this subsection will be confined to compound Palawa words, and by way of corollary whether utterances transcribed as phrases should be interpreted as single words.

This question is particularly pertinent to the interpretation of place names. As often happened elsewhere cross-linguistically, manyPalawa place names had their genesis in the use of a common noun to identify a geophysical feature. Suffixes in some of these names had their genesis in separate qualifiers, and/or as separate explanatory additions. Later the words fused to form a single conventional place name. A few 'names' listed in *Place Names* may in fact be nothing more than common nouns, mistakenly understood by the European recorder as place names. In *Bang.en.er.**menanyer*** (Kenmere Creek) comparative analysis suggests that <Bang.en.er> as a name had its genesis in a Pleistocene word for a (large) stream. Be that as it may, it was adopted by Eastern speakers as a conventional classifier, or else more simply as the name of the creek. <menanyer> as their word for a stream was added either as an item, or as an explanatory addition. In *Lee.er.mang.en.er **Men.nan.yer*** (Prosser River) comparative analysis suggests that <Lee.er> was a Pleistocene word for a (modest) stream adopted as a name, and that <mang.en.er> was a Furneaux speech word for a stream added as an item or as an explanatory addition. Later <Lee.er.mang.en.er> was adopted by Eastern speakers as a conventional classifier or as an existing name, and <Men.nan.yer> was added as an explanatory addition. Both names can be compared with *Bang.en.er.**wap.po*** (Ouse River) in which comparative analysis suggests that <wap.po> is a reflex of a differently derived word for a stream, and that it was added by an intruding population to what for the intruding population was a conventional name for the river.

Some Jorgenson words for *stone* provide further examples. He glossed both <keeka> and <heka> as *crystal* (*Wordlist*: 410). The object identified was probably a vein quartz flake or blank. The same lexeme was incorporated in a number of place names, including *Lar.tit.ick.it.**he.ker*** (Quamby Bluff) and *Tay.tit.ick.it.**he.ker*** (Drys Bluff). The bluffs are both steep, and virtually completely covered by outcrops of rock. In the names the bolded lexeme is probably an explanatory addition or item added by intruding Nara speakers to pre-existing

names for the features. The salient point is that if <heka> was an explanatory addition or item, then its function extended beyond that of a qualifier, and its connotation included the idea of a particular type of hill or bluff.

§ 7.3 Diacritics

With two exceptions, viz Milligan's use of an acute accent in <**é**> to denote [**ei**] (§ 7.5.1.3), and Walkers' use of a bar over the vowel in word elements to indicate a stressed syllable (§ 7.5.2), none of the European recorders provided any extant information with respect to the function of the diacritics that they used in transcriptions. Transcriptions of <**h**> as the second symbol in digraphs in the form <**ph**> probably denoted an aspirated unvoiced bilabial stop (Hock 1991: 14). There is no reason not to believe that transcriptions of <**h**> as the second symbol in digraphs in the form <**th**> did not denote an interdental stop (§ 7.6.1.4). Milligan used the digraphs (**ch**) and (**gh**) to denote aspirated dorso-velar affricates. In transcriptions of word elements in the form CV**h**, the <**h**> probably indicated a long vowel in the same way as it does in modern English (§ 7.6.5). Transcriptions of word elements in the form CVC**e** are more ambiguous. The possibility that in these word elements the <**e**> was silent, and used as a spelling device to indicate the pronunciation of the vowel in the word element, will be discussed in § 7.3.1. §§ 7.3.1, 7.3.2, 7.3.4 and 7.3.5 will discuss the use of dots, dashes, apostrophes and superscript numbers as diacritics, and in the case of the French maritime explorers, their use of accent marks in transcribing vowels.

§ 7.3.1 Dots and Dashes

The insertion of dots in the transcriptions of words by the Robinsons, Cunningham, Scott and Bedford, and the insertion of dashes principally by Milligan, Ḟreycinet and other French speakers, need interpretation. E: gar <lee.her.nan.ner> = *boxfish* (*Wordlist*: 449) is a Robinson word, and E: mj <lay - an - unea> = *seahorse,* a Milligan word. The vast majority of words transcribed by Milligan and the French maritime explorers are transcriptions which do not incorporate diacritics of any kind. Dashes were transcribed very infrequently. Further examples can be viewed in Table 4.4, and in some words for *valley* (p.449). The examples in Table 4.3.6 and other like words for *hand* in *Wordlist* (pp.86-87), may suggest an ambivalence on the part of Milligan, Freycinet, and the other French recorders with respect to whether or not the lexemes which served as qualifiers and items were suffixes in compound words, or phrases in which the lexemes should be interpreted as separate words. Alternatively they may have used the dashes to indicate syllabic boundaries. Another not unconnected explanation may lie in a

deliberately slow and spaced out articulation of the words by a Palawa informant in response to Milligan's reiterated requests for the repetition of words which he wished to record (§ 7.5.1).

There is no reason not to believe that, as is common cross-linguistically, syllabic boundaries were typically signalled by slight pauses and/or other slight but distinctive changes in the articulation of a word. Subject to some matters to be discussed, the incorporation of dots in transcriptions of Palawa words are adequately explained on this basis. The surmise is strongly supported by the stress and accenting patterns identified in Palawa speech (§ 7.9). It is further strengthened by the incorporation of apostrophes by Sterling in words at places where one would expect the conjunction of two syllables (§ 7.3.2), a surmise invariably confirmed by comparison of the Sterling word with an apparent cognate whether the cognate was recorded by himself or by others. See, for example, -: sn <loa**n'**gāre> = *blow*; and compare the word with -: sn <lēcōo**ngh**ēnār> = *blow*; NE: gar <lue.**h**e.u.nup.pan.nane> = *to blow the fire*; and SE: mj <loi**ng**anah> = *blow forcibly* (*Wordlist*: 168). The same comment applies to the incorporation of superscript numbers by Brown in such places, inasmuch as the numbers indicate the strength of the stressing of the preceding syllable (§ 7.3.5). Thus SE: br <nu^{2}be^{2}ra^{1}> = *eye* can be compared with SE: rb <nubrana> = *eye*; SE: fr <nubéré> = *oeil*; and SE: fr <nubra nubéré> = *yeux*.

There are some ostensible exceptions. Very rarely indeed, one suspects that either George Augustus Robinson failed to transcribe a dot, or alternatively thatthere has been a copying omission by Plomley. An obvious example is ***Routeel.litter***, a place name for 'the country back of Waterhouse Point' in which the bolded segments obviously constitute two word elements articulated as distinct units. <**Rou**> can be compared with other place names recorded by Robinson in which the first element is <**Row**> (*Place Names*: 67-68).

More importantly there are a number of word elements which at first sight present as disyllabic word elements. Cunningham's <lune> = *membrum virile* (*Wordlist*: 129) is almost certainly disyllabic, but it will be suggested below that in - : gar <**lone**.ner> =*penis* the bolded word element is in fact monosyllabic. Cunningham's <mōke> = *water / water vessel / bottle*, Robinson's <mo.**ker**> = *water* and Jorgenson's <mo**k**a> =*fresh water* (p.461) provide further examples of disyllabic words. Comparative analysis strongly suggests that word elements in the form CVCe positioned as preceding word elements, and followed by a dot, are monosyllabic. Firstly as exemplified by the words for *water*, the words so transcribed frequently have possible monosyllabic cognates in the form CVC, and in percentage terms the words with ostensibly

disyllabic word elements constitute less than 10 per cent of the total. Secondly, the ostensibly disyllabic word elements when transcribed by the Robinsons invariably fit a template in the form **CVCe**, that is no other vowel in final position was ever transcribed. <lone.ner> provides an example, and further examples have been provided in Part A of Table 7.3.1(a). Cunningham (twice only – see above), Bedford (never), and Sterling (never) recorded any ostensibly disyllabic word elements of this type. But arguably Milligan and Jorgenson did. Thirdly, Sterling used an apostophe to mark a pause in comparable words (§ 7.3.2). The only plausible reason for the incorporation of the dots is that already advanced, viz that they were used to identify syllabic boundaries. There are two viable, but in logical terms non-compatible explanations.

A long-established English spelling convention involves the transcription of a silent **<e>** after a consonant to indicate that the vowel preceding the consonant is a long vowel, or in some cases a diphthong. The words *time / tame / tome* provide examples. Plausibly SE: gar **<noke.ger.rer>** = *make basket* (*Wordlist*: 138) could evidence use of this convention. It is to be compared with an apparent cognate, SE: gar <nōog.gēr.rēr>. In the cognate, a phonetic representation of <nōog> as /no:□g/ is plausible (§ 7.8.1), and indirectly supports a phonetic representation of <noke> as /no:k/. Most transcriptions of Palawa word elements in the form CVCe are consistent with such a surmise. Thus in transcriptions in the form CaCe, it is plausible to phonetically represent the vowel as **/ei/**; in transcriptions of CiCe as **/ai/**; in transcriptions of CoCe as either **/o:/** or as **/ou/**; and in transcriptions of CuCe as **/u:/** or as **/ou/**. Even in the case of **Core**, the transcriptions are explicable on the basis that **<o>** in these transcriptions denotes **/□:/** as in the English words <t**aw**> and <n**augh**ty>.

However, it is very difficult to explain transcriptions in the form Care on this basis. The vowel in English words so transcribed usually denotes **/ɛ:/**. But if the transcriptions of Care were so articulated, one would expect to find cognate word elements transcribed in the form Cɛr. None has been identified. Instead one finds apparent cognate words which indicate that the correct phonetic representation of the vowel in Care is either **/a/** or more doubtfully **/ai/**. Examples are provided in Part A of Table 7.3.1(a). Particularly telling are the words listed in Part B of the Table. In the French and Jorgenson (south) Eastern speech transcriptions of reflexes of *lia = *plural / large* etc. (§ 7.6.2.2), accenting of the final segment is not evidenced. In the Nara words recorded by Milligan, accenting, or alternatively 'colour', is evidenced by the digraph **<ah>**. In the Northern speech words recorded by the Robinsons accenting is evidenced by their transcriptions of **<are>** as the final segments. These transcriptions can be compared with

Sterling's transcriptions of <lĕeānnĕr> and <kārlwārlăr>. It is emphasized that reflexes of *lia are very numerous in the Nara lexicons, and in place names in Nara speech regions. Transcriptions in word-final position in the form **<ar>** will be discussed in (§ 7.6.2.1.3).

Table 7.3.1(a)

Part A

E: gar	care.wan.ner	*thigh*	cf.	-: sn	kăărwĕrrār	*thigh*
N: cr	pare.lepuni	*toe*	cf.	N: cr	pe.ar.ren.er	*toe*
E: gar	mune.ne.ware.rer	*nose*	cf.	E: gar	mune.ne.wore.er	*nose*

Part B

N: gar	tur.**lare**	*thigh*	cf.	W/NW: mj	rawinna **leah**	*knee*
N: cr	ler.**lare**	*foot*		W/NW: mj	releenula **leah**	*knuckle*
				SE: jj	**rilia**	*hand*
				SE: fr	ri **lia**	*mains*
				W/NW: mj	yenna**leah**	*tooth*
				-: sn	**lĕeānnĕr**	*bite*
				SE: fr	pegui lia	*dents*
N: gar	tar.rul.**lare**	*boomer*	cf.	W/NW : mj	tarra**leah**	*forester*
N: gar	koer**lare**	*buck brush kangaroo*		W/NW: mj	noguoy**leah**	*wallaby*
N: cr	ru.bi.**lare**	*badger*				
N: gar	ill.**lare**	*crow*	cf.	SE: mj	lazz'**leah**	*pelican*
N: cr	dra.cul.**lare**	*emu*		W/NW: mj	taya**leah**	*masked owl*
-: sn	kārlwārlăr	*cold*	cf.	N: gar	kārvĕlĕ	*cold*
NW: gar	**laretee**	*native road*	cf.	W/NW: mj	rowé **leah**	*long way off*
N: cr	le.a.**lare**	*salt water*		W/NW: mj	**leah lé**	*sea*
				E: mj	pa̲gra! kum **leah**!	*woe's me*

*Bur.der.**lare***	Blacknans Point	*Mul.nar.ti**lare***	Circular Head
Lan.ner plick.kille	Boomer Hills	*To.no nung.ger.**lare***	Gog / Magog range
*Dil.er.your.her.**lare***	Knole Plain	*Lare.kil.er.**lar***	St. Marys Plains
*Lare.re.**lar***	Wandle River	*Peang.gi.**lare***	marsh at Circular Ponds

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The hypothesis advanced has been tested in another way. There are a relatively large number of French transcriptions in which a vowel was transcribed as either **<é>** or **<ai>**. The transcriptions rarely appear as an initial word element, and more typically transcribe a vowel in a final word element. Both denote **/ei/**, as do the not infrequent Milligan transcriptions of **<é>** (§§ 7.4.1, 7.3.4 and 7.5.1.3). All the Milligan transcriptions are in word-final position. Many of

these transcriptions appear in words which have apparent cognates transcribed by other recorders, including the Robinsons. There are no apparent cognate word elements in the form CaCe. There are in fact a relatively large number of Robinson transcriptions of words in the form CaCe. None of these are final word elements. Yet with the exception of the words listed in Table 7.3.1(b), comparative analysis leaves completely open whether <a> in the transcriptions was pronounced as /a/ or as /ei/. Only Robinson's <lee.pane.ner> as a transcription in any way supports the first hypothesis. It is an apparent cognate of <lehpéneh> = *eye* transcribed by Backhouse, and which untypically for him incorporates an accented <é>. It is inferred that the segment denoted was [ei]. It is thus also inferred that <ēh> in the Walker transcription denoted a segment either identical with or similar to [ei] (§ 7.5.2). The remaining transcriptions all denote other vowels. It seems more likely that the correct phonetic representation of the corresponding word element in the other apparent cognates <pane> is /pan/ with an accented [n] (see the second hypothesis), and not /pein/. The bolded segments in the followingTable indicate the vowels and consonants to be compared.

Table 7.3.1(b)

-: bk	lehpéneh	*eye*	cf.	E: jj	lepena	*eye*
-: wb	lēhpēhnēh	*eye*		-: ar	lepena	*eye*
E: gar	lee.pane.ner	*eye*		NE: cr	le.pe.ner	*eye*
				NE: gar	lee.peen.ner	*eye*
				-: lh	lepina	*eye*
				NE: gm	elpina	*oiel*
cf.						
NE: gar	le.pane.ner	*thumb*	cf.	NE: gar	lee.pur.ner	*thumb*
				-: gar	le.pene.ner	*thumb*
SE: fr	paigui	*dents*	cf.	SE: gar	paege	*teeth*
				SE: gar	pagée	*teeth*
SE: fr	méné	*langue*	cf.	SE: gar	mēnnŷ	*teeth*
SE: fr	cuégui	*oreille*	cf.	SE: gar	vāgŷ	*ear*
SE: fr	vaigui	*oreilles*				
SE: fr	panubéré tailla	*soleil*	cf.	SE: gar	pān.nū.ver.re	*sun*
SE: fr	paléré	*tatouage*	cf.	-: gar	pāl.lēre.rē	*cut / tattoo*
SE: fr	paiguera	*jeter*	cf.	E: gar	pāg.gēr.dēr	*throw*

Only one transcription of CeCe has been identified, viz SE: gar <wim.mer.lege.ge> = *bread fruit* (*Wordlist*: 349), and it too is difficult to explain along the lines of the first hypothesis. Comparable words are SE: gar <wim.me.le.gen.ner> and SE: gar <we.me.leege>, both of which suggest that the bolded <e> in all three words was articulated as /ɛ/.

As an alternative hypothesis it is suggested that the ostensibly disyllabic word elements in the form CVCe were monosyllabic syllables in which the final consonant was accented, and that as a result of the accenting a sound similar to schwa was 'heard'. In other words <e> is at its highest epenthetic with a length of less than one mora. Alternatively and more plausibly a hiatus was detected, and with it a sound interpreted as an indistinct vowel. The articulation of the hiatus may have been comparable with the involuntary articulation by many English speakers of a hiatus after [l] in French words such as <péniblement> = *awkwardly*. In other words, in articulating the lateral most English speakers typically cannot avoid inserting a pause which in the unamused perception of French speakers is an excrescent. It will be suggested in § 7.3.2 that the medial apostrophe transcribed by Sterling is evidence of his perception of the same hiatus. It will be noted that the surmise is more indirectly supported by the fact that Sterling transcribed <**ĕr**> to denote schwa articulated as an unaccented mid-vowel.

There is ample evidence in support of the second hypothesis. Thus it will be noted that in NE: gar <**pude**.yer.car.te.yer> = *no good* (*Wordlist*: 136-137) <**d**> as a segment was voiced. The word can be compared with two apparent cognates, viz N: gar <**pood**.yack.er.ne> = *no good*, and N: gar <**pu.t**er.lu.tic> = *bad*. If the vowels in <pood> are to be interpreted as a vowel cluster (§ 7.8.2), then the absence of an <e> after the <**d**> is effectively explained. In other words, the second <**o**> in <pood> is likely to have been very short, and in consequence the [**d**] in <pood>, whilst voiced, is unlikely to have been heavily accented. Consistently with the matters discussed in § 7.8.2, the <**d**> in <pude> was both voiced and heavily accented.

Plausible and perhaps clearer examples are provided by Koo**p**.er.rer.**p**ar.tole.ler and Ko**be.b**er.rer.**k**ar.tole.ler (*Place-names*: 15). It is suggested that metathesis led to the replacement of the bolded <**k**> in the second name by a <**p**> in the first name, a phenomenon which in turn supports a proposition that the initial segment in the second word element was originally [**p/b**]. Be that as it may, on the basis of the second hypothesis, the transcription of <**e.**> between the bolded bilabials in the second name evidences accenting, and the articulation of <**be.**> as a single segment. This <**b**> thus evidences eclipsis of a rhotic or dorso-velar nasal as the original segment, followed by anticipatory assimilation in the form of epenthetic alliteration. In the first name devoicing of the bilabial which once headed the second element (§ 7.6.8), led to eclipsis. Analysis of the names thus points strongly to the articulation of geminate consonants in the second name. Table 7.3.1(c) provides further examples to illustrate the points raised in this paragraph. Bolding indicates the relevant lexeme(s) to be considered. The table should not be studied without an understanding of the matters referred to in § 7.6.8.

Clearly both hypotheses can explain words such as **lone.**ner and **kome.**min.ne. But it is difficult to reconcile the bolded <**e**> in <nāre.rēr> and *Tete.ther.luna* with the first hypothesis.

Table 7.3.1(c)

Wordlist: 82 Words for *shoulder*
E: cr **lone.**ner Cf. NE: gar tal.**lar.**ner + 2 apparent cognates
E: cr to.**len.**ner + 2 apparent cognates

Wordlist: 106 Words for *chin*
N: **gar** **kome.**min.ne Cf. NE: gar **cum.**meen.ner + 2 apparent cognates with geminate consonants
E: gar **co.**min.er + 5 apparent cognates with consonant simplification

Wordlist: 143 Words for *cockatoo*
SE: gar **nāre.**rēr Cf. SE: gar **nar.**rar+ 1 apparent cognate with geminate consonants
SE: mj **'nghara** + 1 apparent cognate with consonant simplification

Dictionary Names for Bluffs
Hole.ler.win.ner Waterhouse Pt. Cf. ***Har.ler.bic.er.ler*** Double Sandy Cape
Kale.lone.doke S pt. of Suicide Bay ***Gul.ler.rul.ler.leve.ve*** Black Bluff

Wordlist: 246 Words for *gun/musket*
-: gar **pude.**ger Cf. NW: **gar.par.de.**bar + 3 apparent cognates
SE: gar **pār.**lē.cān.nā **pār.**lēe.nēe + 5 apparent cognates

Dictionary Names for islands
Tete.ther.luna Slopen Is. Cf. ***Tid.de.ger.lang Roun*** Grummet Is
Tid.de.mer Trefoil Is.

Wordlist: 122 Words for *back*
E: gar **tole.**lennar Cf. NE: **teel.**put.ten.ner / **tee.**lip.ten.ner + 6 apparent cognates

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Other potential examples cannot be adequately explored without bringing into account semantic analyses. But Milligan's *Pooranettere* as a name for Mount Wellington (*Place Names*: 86) presents as a word in which the bolded vowels are excrescents which had their genesis in the type of sound described.

Somewhat similar comments apply to word elements in the forms C**Vrn**, C**Vwn**, and C**Vun**. It seems clear that in these word elements Vw and Vu were not diphthongs (§ 7.8.2). Comparative analysis suggests that <**w**> and <**u**> were lenited forms of a rhotic (§ 7.6.2.1.2). Very plausibly they too had a length of less than one mora, and if they were articulated in much the same way as the approximant which gives 'colour' to many English words (Crystal 1995: 245) the

elements are better interpreted as monosyllabic utterances. Their interpretation is more fully discussed in § 7.6.2.1.2

It is also relevant to consider the Robinson transcriptions which incorporate diacritics that provide information with respect to stressing and/or accenting (§ 7.3.3). Almost invariably transcriptions of CVV(C) in words with these diacritics have only one of the vowels marked. Typically it is the first vowel, and the diacritic transcribed is typically a bar. There are numerous transcriptions of <**ōo**>, and as in the case of Robinson transcriptions of <**ēe**> and other transcriptions of VV with a diacritic, it can be assumed that the transcriptions record vowel clusters (§ 7.8.1). Transcriptions of <**ou**> are not common. It is plausible to assume that <**ōo**> and <**ou**> are alternations of the same vowel cluster. Words such as E: cr <**drown**.ner> = *grass;* E: gar <**troun**.nin.er> = *grass;* and -: sn <**trōo**nār> = *long grass* (*Wordlist*: 347) illustrate the point. Importantly words such as SE: gar <**lāw**.wāy> = *going up* (p.185); SE: gar <**lōw**.ēr.n□.mē> = *sea egg* (p.274); SE: gar <**lōw**.gēr.nēr> = *run* (p.376); and N: gar <**pēw**.gēr.tr□.gān.nān.nēr> = *sew* (p.382), establish that Robinson transcriptions of Vw are to be interpreted as V + [**w**]. There are no Robinson words of these types with diacritics which are not so marked. The matter last raised is further discussed in § 7.7.1. The question whether the bars indicate either stressing or accenting will be discussed in § 7.3.3.

By way of summation, it is suggested that whilst the two hypotheses are not mutually exclusive as explanations, such a scenario would indicate gross inconsistencies on the part of the Robinsons, a view which is not evidenced by their other transcriptions unless it is assumed that the Palawa had a set of contrasting vowels which they used in a consistent manner. Milligan makes very strong statements to the contrary (Milligan 1890: 9), and comparative analysis of Palawa phonology in other respects consistently and completely supports his statement (§ 7.8.4). Accordingly, whilst no firm conclusion can be reached, the second hypothesis is preferred.

§ 7.3.2 Apostrophes

None of the recorders state how the apostrophes placed by them in transcriptions of words are to be interpreted. In the case of Milligan, the apostrophes appear before transcriptions of <**ng**> as a segment only when the segment is in word-initial position. In other positions he transcribed a front vowel before <**ng**>, a practice followed by other recorders, including the French explorers. The dorso-velar nasal in any form of initial position was unfamiliar to the European

recorders, would appear at times to have been articulated distinctly, and at other times very indistinctly (§§ 7.4.1.1 and 7.6.1.1). It is inferred thatthe apostrophe marks the segment as a dorso-velar nasal. The matter will be revisited in § 7.6.1.1.

An apostrophe was also regularly inserted by Sterling in a medial position in words, and occasionally in the same position in the transcriptions of other recorders. In the Sterling transcriptions it would appear to have always followed a stressed word element, and accordingly it probably marked a pause perceived by him as a hiatus. A further inference is that apostrophes also marked the boundary between word elements. As examples see -: sn <cat'ōrăr> = *posteriors* and <loan'gāre> = (to) *blow* cited above. All Sterling transcriptions that incorporate an apostrophe are consistent with these hypotheses. Accordingly, it is further suggested that for interpretative purposes, the apostrophe served the same function as the ostensibly epenthetic <e> in Robinson and Cunningham transcriptions of CVCe (§ 7.3.1).

§ 7.3.3 Marks to Indicate Stressing and Accenting

The stressing of syllables is well attested in the historical records (§§ 7.4.2 and 7.3.5). Walker indicated stressing by placing a long mark over the vowel in the syllable (§ 7.5.2). He also placed a "˘" over other vowels. An example is -: wb <cōăntānnĕh> = *ground.* It is inferred that the latter marked short and under-stressed syllables, and when part of a vowel cluster, an unaccented vowel. It needs to be kept in mind when considering contemporary statements with respect to stressing and accenting, that in nineteenth-century English 'stressing' as a term included 'accenting' (*Oxford English Dictionary*). The same marks were regularly used by Sterling, George Augustus Robinson and Cunningham (*Wordlist*: *passim*), ostensibly in very similar fashion. The inference is strengthened in the case of Robinson and Cunningham by their clear marking of syllabic boundaries (§ 7.3.1). Sterling's <nārrăgōonăr> = *breast,* Cunningham's <nērrĭnōok> = *nipple,* Sterling's <nōrīddĭăck> = *no good* and Robinson's <nōriddŷăck> = *bad* provide examples.

§ 7.3.4 Other Marks

Vowels bearing accent marks appear in a number of transcriptions. Both the French transcribers and Milligan transcribed <é>, limited in the case of Milligan to the vowel as a final segment in a word. There can be no doubt that in both cases <é> transcribed [ei] (§§ 7.4.1 and 7.5.1.3). The other marks transcribed were <á>, <â>, <è>, <ī> and <î>, nearly all of them by Freycinet (*Wordlist*: *passim*). The paucity of transcriptions does not enable any meaningful comparative

analyses to be made, but they may merely reflect his transcription of vowels in Palawa syllables which were counterparts of French syllables in which the vowels were similarly so marked.

§ 7.3.5 Interposed Numbers

In transcriptions by Brown, numbers ranging from 1 to 4 were frequently inserted. Plomley states,without citing a reference, that they indicated the degree of stress to be afforded to the preceding syllable (*Wordlist*: 76). There is no reason to disagree with the explanation. The numbers were inserted at the end of groups of segments that present as syllables, and which in apparent cognate words transcribed by the Robinsons were syllables. Thus SE: br <**mu**^{4}**ai**^{1}> = *nose,* can be compared with a less contracted SE: gar <**mūegēe**> (p.104). Comparison with the stress marks in apparent cognate words transcribed by Robinson and Sterling suggests that the higher the numeral, the greater the emphasis; but the number of words available for comparison is too small to enable firm conclusions to be reached.

§ 7.4 Early Nineteenth-century Diction

Before discussing the spelling conventions adopted by the maritime explorers and early colonists to record Palawa words, it is relevant to investigate whether the articulation of segments in French and English as spoken at the end of the eighteenth century differed in any important respects from their articulation in the twentieth and twenty-first centuries. As a corollary, potential differences in the French articulation of transcribed segments from English pronunciation of the same transcriptions also need to be identified, and discussed.

§ 7.4.1 French Diction

French pronunciation has remained stable over the last three centuries. Furthermore, by the end of the eighteenth century the French had settled spelling conventions. There have been some marginal changes in the articulation of a few segments, but these have been largely confined to the pronunciation of nasalised vowels in certain contexts, and again in confined contexts to palato-alveolar affricates. There is no evidence that any of these sounds were phonemes in Palawa, and in the case of nasalised vowels, no evidence that they were articulated at all. If the nasalised vowels had been articulated, they would have been detected, and presumably distinguished by the French explorers, by Gaimard, and by at least some of the English recorders (§ 4.1.10). There are no transcriptions of Palawa words with final word elements in the form CV**n**. Nor have any transcriptions of medial word elements in apparent cognate words

been consistently identified, in which the French transcription was in the form CV**n**, and the English transcription in the form CV. Milligan (1890: 12-13), in his description of the spelling conventions used by him, refers to the articulation of a fluted [**ü**] similar to that articulated by French speakers, and it can be inferred that if he had detected nasalised vowels, he would have noted the fact. With respect to the palato-alveolar affricates, §§ 7.6.4.1, 7.6.4.2 and 7.6.43 discuss, and their accompanying tables list, most Palawa words in which an affricate was recorded. Overall they are very few, and in most cases comparison with apparent cognate transcriptions indicates that the segments were allophones of the stops and other readily identifiable segments which appear in the apparent cognate words.

Two differences between the French and English articulation of consonants need to be noted. Transcriptions of **<t/d>** in English denote alveolar plosives (Crystal 1995: 244). The English sound is produced by the tip of the tongue and its rims touching the roof of the mouth on or behind the alveolar ridge and side teeth respectively. Most English alveolar plosives are apico-alveolar stops, but in some contexts they are post-alveolar stops (p.244). In other often onomatopoeic contexts, the alveolar plosives can alternate with post alveolar affricates. Thus English words such as ***drat*** and ***dram*** have a post-alveolar affricate in word-initial position, and a post-alveolar affricate distinguishes ***drake*** from ***duck*** (cf. Onions 1966). English articulation of dental plosives is virtually confined to voiced and unvoiced affricate, transcribed as **<th>**. In both eighteenth-century and modern French, transcriptions of **<t/d>** typically denote an interdental plosive. As a result, by the end of the eighteenth century **<th>** as a French transcription had become archaic, and no longer denoted the pronunciation of a sound which in any way differed from the pronunciation of interdental stops. There are less than a dozen French transcriptions of **<dr>** and **<tr>**. Most of these words have matching English transcriptions. This suggests that their French recorders had also identified a post-alveolar affricate. Table § 7.4.1 provides examples. The relevant segments have been bolded.

Table 7.4.1

N: gm	**tr**enn houtne	*corbeau*	cf.	-: sn	**tr**i'ünyār	*crow*
N: gm	**tr**eoute	*pélican*		E: jj	**tr**ewdina	*pelican*
SE: fr	**tr**ini	*mettre du bois au feu*		-: jj	**tr**etetea	(fire) *light*
				E: mj	tontaiyenna	*ashes*
SE: fr	le**dr**ae	*dance*		W: gar	truedecum	*dance*
SE: fr	manoua**dr**a	*graine de Eresinifera*				
SE: fr	**dr**ué	*feuille d'arbre*				

Attention is also drawn to SE: fr <**ri**> = *hand* plus apparent cognates (*Wordlist*: 86), and SE: gar <**dree**> = *hand*. There are no French transcriptions of <**th**>. The matters referred to establish that in Palawa a post-alveolar affricate was articulated, and also either a dental or interdental plosive, but leave open whether transcriptions of <**t/d**> denote apico-alveolar stops, post-alveolar stops, dental stops, interdental stops, or all four. It cannot be assumed that the pronunciation of apico-alveolar stops in living mainland Aboriginal languages provide a guide to Palawa pronunciation, nor that there was no variation in the pronunciation of the sound or sounds transcribed across the various language groups. The points raised will be further discussed in §§ 7.6.4.1, 7.6.4.2 and 7.6.43.

Less problematic are the transcriptions of <**w**> by English recorders in words where the corresponding French transcription was <**ou**>. The words for *arm* sublisted under SE: fr <**hou**ana> (*Wordlist*: 83) strongly suggest that the segment articulated was the labio-velar semi-vowel, and not the French diphthong (§ 7.7.1). <houana> itself evidences labiovelarization of what was originally a dorso-velar stop (§§ 7.6.2.3 and 7.6.7.2). The words for *arm* recorded by Brown and Milligan evidence further phonological progressions which involved dissimilation, followed later by the eclipsis of [**k/g**].

§ 7.4.2 English Diction

Even now in the twenty-first century, a number of English spelling conventions quite famously remain unsettled. Spelling conventions in the form of digraphs were used and remain in common use. Nevertheless, Milligan's transcriptions of <**gh**> and <**ch**> excepted (§ 7.5.1), as well as transcriptions by English recorders of <**th**> to indicate a dental fricative, the use of digraphs to transcribe segments in Palawa words was very rare. Generally speaking it would seem that digraphs as transcriptions were avoided as much as possible by both the French and the English recorders. The dots that mark syllabic boundaries support Milligan's comments with respect to geminate consonants (Milligan 1890: 13; § 7.3.1). There is no evidence that transcriptions of <rr> indicate tapped rhotics. On the other hand the transcriptions of Charles Robinson of <**ll**> as a final segment in word elements, discussed in § 7.6.2.2, was probably used as a device to indicate heavy accenting. Transcriptions of <**ck**> may have been used for the same purpose (§ 7.6.3.1). It is convenenient to note at this juncture that whilst a French speaker, Gaimard so used <**nn**> as a transcription (§ 7.6.6).

In terms of interpretation, the most troublesome transcriptions are the transcriptions of vowels. As noted in Chapter 5, some of the English recorders were well-educated mariners, colonists and expatriates who spoke (south eastern) English. Other well-educated recorders spoke (Scottish) and (northern midlands) English, and consequently differed markedly in their pronunciation of <u> as a vowel, and to a more limited extent in their pronunciation of a number of diphthongs. The birthplace and region of upbringing of assigned servants such as McGeary and Sterling is not always known, and accordingly their pronunciation of certain vowels and diphthongs cannot always be confidently evaluated. As noted in § 4.1.4, Walker and Backhouse grew up in, and resided in England's northern Midlands. Yet as between themselves, they used different transcriptions to record what must have been the same Palawa vowels (§ 7.5.2). There was a general failure by most of the minor recorders to indicate the presence of geminate vowel clusters, a feature specifically noted by Milligan (§ 7.5.1.3.) and established by comparative data (§ 7.8.1). Similar comments apply to a general neglect to distinguish other vowel clusters from diphthongs. As noted by Milligan (1890: 9-10), there was considerable variation in the articulation of the same words by individuals, a comment not only ostensibly but in statistical terms amply borne out by the variations which occur in the transcriptions of Palawa words. As an example see the transcriptions of vowel clusters in words for *wombat* (*Wordlist*: 312-313). A selection is provided in Table 7.4.2(a). The table has been enlarged to include Pama-Nyungan words not only because they also illustrate the point, but because they illustrate how labiovelarization when followed by cluster simplification affected those articulations. Bolding indicates the relevant lexeme. The medial consonants in some of the Pama-Nyungan words have been affected by eclipsis and epenthetic alliteration (§ 7.6.8).

Table 7.4.2(a)

W: gar	**quoi**ber	W: gar	**koy**ber	-: gar	**koi**ber
N: jj	**quoi**ba	W: cr	**yuor**b	W/NW: mj	**koee**bah
W/NW: mj	**koee**ba				
cf.					
Wiradjuri	**guu**lang	and in turn with		Wiradjuri	**wam**bad
				Sydney	**wum**bat
				Kaurna	**war**to
				Woiwurrung	**war**endj

Another difference in nineteenth century English dialects was the loss in (south eastern) English of [r] in word elements in the forms CV**r**C, and its retention in (Scottish) English, (Irish) English, and the dialects of the northern Midlands. It is unlikely that either the French

recorders, northern English recorders or the Scottish recorders would have transcribed word elements in the form CV**r**C unless a rhotic or retroflex had in fact been identifed. There is no definitive evidence which establishes for example that transcriptions of this type were ever used to transcribe [**a:**]; this despite the hundreds of Palawa transcriptions in the form V**r**. On the other hand, comparative analysis reveals that [**a:**] as a segment often evidenced a lenited form of **/ar/** and other doublets in the form V**r**. Examples are provided in Table 7.4.2(b). Each of the listed words in the first group was glossed as *finger,* in the second group as *thumb,* and in the third and fourth groups as shown. Some apparent cognate south eastern Australian words have been introduced because apart from the rarely used and ambiguous digraph in the form V**h,** the European recorders had no spelling convention which distinguished long vowels from short vowels. Bolding indicates the relevant segment(s), and underlining the second arm of a doubly reduplicated word. Alternations in medial positions between rhotics, laterals and alveolar stops need to be kept in mind (§ 7.6.2.1.1).

Table 7.4.2(b)

W: cr	dra**r**.bur.ick	W: gar	dra.bu.rick				
NE: gar	pa**rl**.ter.me	NE: gar	pe**l**.te.wot.ten.ner		-: gar	pa**l**.le.wot.ten.ner
W: cu	wā**r**'rănōok	W: cu	wy.ma**r**.nock				
NW: cr	wa**r**.ner	SE: jj	wa**n**				
NE: gar	lee.pu**r**.ner	-: gar	le.pe**n**e.ner				
NW: gar	pa**rn**.nic.er	*water*	cf.	Bunganditj	pa**rr**ik	*water*
W: garpa**r**.nick.er		*water*		Woiwurrung	baan^{y}	*water*
-: gar	col.le**r**.pe**r**.rame.ner	*salt water*	cf.	Warrnambool	katepaa	*tide*
N: jj	pa**r**.ren.ner	*tomahawk*	cf.	Warrnambool	partpartkurt	*axe*
				Warrnambool	mumbaat	*axe*
E: mj	parattah	*frost / ice*	cf.	Warrnambool	parra^{y}t pim	*frost*
				Bundganditj	<baat>	*hail*

*Pa**rn**.doke.en.ner.ly.en.pin.der*	Elizabeth River	cf.	*Pa**n**.duke.ke.ner*	(stream at 'Ellinthorpe')
*Pa**re**.rer.boke*	Harcus River		*Pa**ne**.tur.he.yac*	Harcus River
*Pa**r**.ren.der*	Pipers River		*Pa**ne**.run.ner*	Henty River
*Pa**r**.mone.er*	Inglis River		*Pa**ng**.er.moon.er*	campsite (creek) at Ann Bay

§ 7.5 Nineteenth Century Descriptions of Spelling Conventions

§ 7.5.1 Milligan

Milligan prefaced a description of the spelling conventions adopted by him with the following remarks (Milligan 1890: 12):

> The Tasmanian Aborigines made use of some sounds not met with in the English language; one, for instance, corresponds to the sound of *u* as pronounced by the French; others are equivalent to *ch* and *gh* in the Scotch and Irish *loch* and *lough*; and there are some curious combinations of nasal and gutteral sounds.
> The Orthography of the Aboriginal Vocabulary agrees as nearly as possible with the ordinary phonetic expression of the English alphabet ...

With respect to consonants, he stated (1890: 13):

> Consonants have their usual sounds when single; *ch* and *gh* are pronounced as in the German word *hochachten,* and in the Irish *Lough.* When a double consonant, or two consonants stand together, the first carries the accent, as in the English words *cunningly, peppery, cobbler, pipkin.*

He would appear to have been unaware of the difficulty experienced by the Palawa in articulating the sibilants in English words. In any event he would appear to have been unaware of the improbability that some of the sounds he identified as sibilants were in fact sibilants. Thus he recorded *Terelbesse* as a name for Swan Island (*Place Names*: 76), and <lazz'leah> as a word for *pelican* (*Wordlist*: 155). That the segments articulated were not sibilants was apparent to Robinson and others (*Wordlist*: 28 (Baudin); 28 (Robinson); 29 (Davies)). The point will be revisited below. Nor does Milligan appear to have noted anything unusual about the articulation of rhotics, a matter commented on by Baudin (p.28), and perhaps by du Fresne (p.27).

Not surprisingly, he did not distinguish between [j] as a segment in initial position, and the same semi-vowel in medial or final position, a matter which will be discussed in § 7.7.2. He commented (1890: 13):

> *y* is to be sounded as in English words *holy, glibly, yonder, yellow,* etc.

With respect to vowels Milligan stated (p.12):

> (t)he orthography of the Aboriginal Vocabulary agrees as nearly as possible with the ordinary phonetic expression of the English alphabet, with the following qualifications.

Importantly he then provided detailed comments with respect to the pronunciation of most of the vowels. In quoting his comments, and in the interests of providing greater clarity, I have taken the liberty of placing each comment on a separate line:

> The vowel *a*, when it stands alone, is to be pronounced as in *cat, rap,* etc., ...
> *aa* is sounded as *aw* in the word *lawn,*
> *e* is pronounced as in the English word *the,*
> *ee* as in *thee, me, see* etc.,

e (with an acute accent) is to be sounded like *a* in *potatoe* and *day;*
i is to be pronounced as in *sigh, fie,* etc.;
o is to be sounded as in *so, go, flow,*
oo as in *soon, moon,* etc.;
u is never to be sounded as in the English word *flute,* its usual sound being that in French words *une, usage, usurier, fumer,* etc.,
but when followed by a double consonant, or by two consonants, it is to be sounded as in English words *musk, lump, bump,* etc.;
i before another vowel has a full sound as in the English words *shine, riot;*
ei coming together are to be pronounced as in *Lei'psic;*
ou as in *noun;*
oi as in *toil,* etc.

§ 7.5.1.1 Consonants

As already noted, his description of the conventions used by him to transcribe Palawa segments is not all encompassing. The comments which follow are based on comparisons of Milligan's transcriptions with the transcriptions of the other European recorders, and at times with his own transcriptions.

Geminate Consonants

Milligan's observations indicate that in the case of geminate consonants, the juxtaposed segments were not phonetically geminate in that the second articulation of the consonant received less emphasis. Comparative analysis provides strong support for his observation. Thus the dots inserted in words by the Robinsons and others ostensibly and almost invariably separate the consonants as segments in juxtaposed word elements. Furthermore, apparent cognates of words transcribed with geminate consonants, instead of incorporating the second consonant often evidence either lenition or eclipsis in lieu. See below. Whether the transcription of geminate consonants accurately identified geminate consonants is an issue which will be discussed in § 7.6.6.

Other Consonant Clusters

Comparison of many consonant clusters transcribed by Milligan, with consonant clusters in apparent cognate words transcribed by others but separated by dots, aids the location of syllabic boundaries in Milligan words (§ 7.3). The comparisons indicate that as a result of eclipsis the initial consonant in the following word element had been lost, and later replaced by epenthetic alliteration (§ 7.6.8). Table 7.5.1.1(a) provides examples in the form of words and names for rivers. In these examples bolding indicates vowels left exposed by eclipsis, and bolding coupled with underlining the epenthetic consonants. The salient point is that there is ample evidence in support of Milligan's observation.

Table 7.5.1.1(a)

Bang.en.er Wap.po	Ouse River	cf.	*Per.ram.men.ner*	Browns River
			Par.ren.der	Pipers River
Plee.her.mule.hum.lar	hill on South Esk River		*Pare.rer.boke*	Harcus River
Roob.bel.er Marng.en.er	Pipers River	cf.	*Moor.ron.noe*	South Esk River
Mangana	North Esk River		*More.rut.ter*	Tamar River
NW: garploo.hor.ne	*river*	cf.	-: gar man.nan.yer	*river*

Dorso-velar Nasals

Milligan identified the dorso-velar nasal as the initial segment in a number of words. His transcriptions of this sound were in the forms <'ng> and <Vng> (§ 7.1.4). In terms of Milligan's description of the methods used by him in collecting his vocabulary (1890: 7-8), it is suggested that <'ng> transcribes a dorso-velar nasal, and that <Vng> is a transcription of the same nasal less distinctly articulated within Milligan's perception, but as a result of repetition at Milligan's request, emphasised or over-stressed by Milligan's informant for his benefit. The nonexistent vowel was his interpretation of a perceived hiatus. It was also transcribed by other recorders, including Jorgenson and the French explorers (§ 7.6.1.1).

One can only speculate as to the apostrophe transcribed. Plomley plausibly suggests (*Wordlist*: 76) that it was used to identify his transcriptions of <ng> as a single segment, and nasal. If so, one infers that Milligan in some way interpreted the articulation of the dorso-velar nasal in initial position as different from the same nasal in final position. Perhaps the slight hiatus detected by him was this time denoted by an apostrophe.

Dorso-velar Affricates

Milligan believed that he had identified dorso-velar affricates. The affricates in the examples given by him, viz German *hochachten,* and Irish *lough* (1890: 12) were transcribed by him as **<ch>** and **<gh>** respectively. With one exception only, no other recorders identified the segments. See *Night.bone* as a name recorded by Robinson for the Two Sisters, a small tier of hills (*Place Names*: 46). The segments so identified by Milligan more probably were aspirated allophones of dorso-velar nasals, and/or dorso-velar stops. Thus SE: mj <tu**gh**rah> = *thigh* can be compared with NE: gar <tur.**cuck**.el.ler> = *thigh* plus apparent cognates (*Wordlist*: 91). In some cases comparison of Milligan's transcriptions of **<gh>** with apparent cognates indicate

that the segments straddle a syllabic boundary. In other words, in these transcriptions <**gh**> is to be interpreted as either a consonant cluster, or a consonant followed by a hiatous as a vocal release, and in any event not as a single segment. Thus in *Preminghana* (Mount Preminghana, see p.62) <ng> is the final segment in the second word element, and <**h**> is the initial segment in the third element. Compare also SE: mj <para**nghé**> with SE: mj <paragana> both words for *shoulder*, and with E: cr <par.ren.ner> = *shoulder blade* (*Wordlist*: 82).

Glottals

Milligan transcribed <**h**> as the initial segment in a number of following word elements. *Preminghana* and <para**nghé**> cited above are examples, and some other examples together with comparisons with like transcriptions by others are provided in Part A of Table 7.5.1.1(b). They may evidence the articulation of a glottal [**h**]. Alternatively, and more probably, they evidence Milligan's best effort at recording a vocal release identified by him as a short and indistinct vowel. Compare Sterling's transcription of an apostrophe in the same context (§ 7.3.2). No Milligan words with <**h**> in initial position have been identified. This is of some interest in connection with other European transcriptions of [**ŋ**] and [**k/g**] in word-initial position in some words, and in apparent cognates, including some Milligan words, an exposed vowel in word-initial position following eclipsis of the original consonant(§ 7.6.1.1). For examples see the words for *hand* sublisted under <han.ner.min.ner> (*Wordlist*: 85).

Milligan also transcribed <**h**> after a vowel at the end of words in contexts when a segment would not have been articulated. The same digraphs were adopted by Walker and Backhouse to indicate a long vowel and/or a moderately accented vowel (§ 7.5.2. The examples provided in Part B of Table 7.5.1.1(b) are typical Milligan transcriptions. Bolding indicates the relevant segment(s). In Part A each of the examples evidences eclipsis. The words in the first column evidence the perception of a hiatus, and the compared words epenthetic alliteration. In Part B the words in the first column illustrate use of a digraph, and in the second column its non-use, presumably in some cases because the final segment was not accented.

Table 7.5.1.1(b)

Part A

E: mj	wugherrinna	*teeth*	cf.	E: cr	werg.er.ren.er	*teeth*
E: mj	wughrinna	*tooth*		E: bd	waggrunna	*teeth*
E: mj	wugherinna rugotoleebana	*fang*		E: mj	wuggerinna rotaleebana	*tusk*

Part B

E: mj	wicninnah	*elbow*	cf.	E: cr	we.nen.er	*elbow*
SE: mj	waycninnah	*elbow*		SE: mj	wienenna	*angle*
SE: mj	poyneh	*pettish*	cf.	SE mj	poiné moonalané	*anger*
				SE: gar	pye.ne	*sulky*
				SE: gar	py.ny	*no like*
SE: mj	liapooncranah	*fury*				
E: mj	nannéaquanhe	*growl*	cf.	SE: mj	nannaquannapeiere	*growl*
W/NW: mj	puggytemoorah	*stupid*				

Sibilants

Milligan transcribed <**zz**> and <**ss**> as segments, but did not discuss the sounds denoted by the transcriptions. As already noted (§ 7.4), it is improbable that the sounds heard were sibilants (Plomley 1976: 27 and 28). Comparative analysis indicates that in the same or similar contexts the sounds identified by other recorders were either palato-alveolar affricates (§ 7.6.4.1) or lamino-palatal stops (§ 7.6.3.5). That he transcribed the segments as geminate consonants which also spanned syllabic boundaries indicates the perception by him of an articulation which exceeded one mora in length, and which may have been aspirated, facts which tend to strengthen the surmise that affricates were articulated (§ 7.6.4). As noted above, sounds identified by him at syllabic boundaries included [χ], [ɣ] and [**h**]. Table 7.5.1.1(c) lists all Milligan transcriptions of <**s**> and <**z**>, and provides comparable transcriptions by other recorders. The comparable transcriptions also reveal the identification of affricates. It is therefore inferred that a degree of aspiration was present in most of the articulations transcribed.

Table 7.5.1.1(c)

Terelbesse	Swan Island	cf.	*Tare.reen.ner*		Preservation Island	
			E: gar	ty.er.rit.yer	*island*	
			NE: gar	lee.ar.ra.wit.tar	*island*	
SE: mj	lazz'leah	*albatross*	NW: gar	larth.bar	*pelican*	
			SE:: gar	tuth.er.vuth.er	*come*	
			SE: gar	tuks.er.nuks.er	*come*	
			SE: gar	tuz.er.vuz.er	*come*	
			SE: mj	tutta watta	*come*	
SE: mj	lazzakah	*brush kangaroo*	W: cr	lar.the.ker	*kangaroo*	

Post-alveolar Affricates

Milligan's transcriptions indicate that he detected the post-alveolar affricate [**d^{r}/ t^{r}**] in both its voiced and unvoiced forms (§ 7.6.3.4), and, after dissimilation and eclipsis, as a rhotic. He does not discuss the sounds. Table 7.5.1.1(d) provides examples, including comparable words transcribed by others.

Table 7.5.1.1(d)

E: mj	relbooee **tr**awmea	*flay*	cf.	SE: fr	kin**dr**ega	*(to) beat*
SE: mj	rannah moorinah	*indolent / inactive*		SE: gar	**tr**ar.ner.vur.ne	*lazy*
E: mj	**tr**ameeneah	*kangaroo skin*		E: gar	**tr**um.men.yer	*kangaroo skin*

***Transcriptions of* 'mpt' *and* 'pt'**

In a number of words Milligan, and in one word Bedford, identified a [**p**] as the medial segment in consonant clusters transcribed in the form <**mpt**>. The sound was not detected by any other recorders in similar contexts, nor at all. It is suggested that as in English a [**p**] was identified by Milligan and Bedford because in this context closure of the nasal is followed by a slight pause before articulation of the stop. An English example is *empty* which can be compared with its OE counterpart *geæmtigian.* Part A of Table 7.4.1.1(e) provides examples followed by comparable words as transcribed by other recorders. It will be noted that in the comparable words an inserted dot indicates that [**m**] and [**t**] were the final and initial segments respectively in contiguous word elements. It follows that the Milligan and Bedford transcriptions can be interpreted as straddling a syllabic boundary. The point emphasises the fact that whilst a [**p**] was identified, it was not in fact articulated as a segment.

Milligan also transcribed two words with <'pt / pt> as the initial segment (Part B of Table 7.5.1.1(e)). Once again the sound was not identified by other recorders. As indicated by some comparable words, the sounds were allophones of [t], and plausibly evidenced slight aspiration of an unvoiced alveolar stop by the informant.

Table 7.5.1.1(e)

Part A

SE: mj	ria**p**oolu**mpt**a	*wrist*
E: mj	oolu**mpt**a	*head*
E: bd	olu**mpt**ha	*head*

Table 7.5.1.1(c) continues

W/NW: mj	comptena	*spirit of evil*	cf.	NE: cr	loo.kome.ten.ner	*devil / evil spirit*
				E: jj	comtena	*devil*
				E: lh	comtana	*devil*
E: mj	murramanattya onamarumpto	*long way*				
E: mj	malompto	*shore*				
E: mj	luggana golumpte	*strike*				
E: mj	raoompta	*wombat*		E: mj	rowoomata	*wombat*
				E: gar	drogermutter	*badger*
				SE: mj	rowitta	*wombat*
E: mj	rene nunempte	*run together*				

Part B

W/NW: mj	'ptunarra	*frigid*	cf.	NW: gar	tonenarrer	*cold*
W/NW: mj	ptoarah leah	*mouse*		SE: gar	toreer	*mouse*

§ 7.5.1.2 Semi-vowels

To again quote Milligan (1890: 13), this time with relevant bolding:

> *y* is to be sounded as in English words *holy, gliibly, yonder, yellow,* etc.

The importance of this observation cannot be over-stressed. Milligan saw no need to distinguish between [j] as an initial segment and phoneme, and the same or a very similar sound when articulated as the final segment in a word element, and/or as part of a palatised consonant. He immediately continued:

> *i* before another vowel has a full sound as in the English words *shine, riot;*

It can be inferred, firstly, that at the end of word elements [j] was short and clipped as it still is today in upper and middle class (south eastern) English, and less than a mora in length. Secondly, that under no circumstances did Milligan ever transcribe <y> as a segment when in phonetic terms its pronunciation was a diphthong as in words such as *by, guy* and *nigh.* There is no reason to suspect that in so transcribing Palawa words he ever departed from a recording of the phonetic quality he assigned to <y>. However, there is perhaps more reason to suspect that in transcribing <i> as the first segment in a vowel cluster, he may not have been completely consistent. Thus one can compare SE: mj <pooariumena> = *waist* with SE: mj <pooaryumena> = *waist* (*Wordlist*: 125). Even so, consistency is provisionally restored if one accepts Milligan's injunction that 'carelessness and laxity of articulation' on the part of his informants was ubiquitous (1990: 9). The essential point made, discussed on a number of occasions elsewhere in the thesis, is that if the different vowels were rarely, rather than typically contrastive (§ 7.8), then in this and numerous like examples, Milligan was merely recording variations in the

pronunciation of the same set of segments. The jury may have to remain out until a completely comprehensive etymological comparison of Milligan words with their counterparts as transcribed by others can be prepared. But even so, and in the meantime, the essential points made remain valid.

Nevertheless, the Milligan transcriptions of <y> as a final segment in word elements warrants some further comment. Milligan would not have been aware of palatalisation and labiovelarization as linguistic phenomena. As will be discussed later, palatalisation and labiovelarization played a major part in the development of the Palawa languages (§§ 7.6.7.1 and 7.6.7.2). Milligan, Robinson and others undoubtedly identified the segment they heard as a consonant plus [j]. In fact their transcription of CiV as a syllable in comparable words may well evidence the dissimilation of palatised consonants in appropriate contexts. Palatisation is discussed in § 7.6.7.1, and examples can be viewed in Table 7.6.7.1.

§ 7.5.1.3 Vowels

It is convenient to repeat some of Milligan's general statements, firstly that '(t)he orthography of the Aboriginal Vocabulary agrees as nearly as possible with the ordinary phonetic expression of the English alphabet ...' (1890: 12); secondly, his reference to 'the frequent alliteration of vowels' (p.10); and, thirdly, 'the distinctly different pronunciation of a word by the same person on different occasions is very perplexing ...': and finally his detailed description of the spelling conventions used by him to transcribe vowels:

> The vowel *a*, when it stands alone, is to be pronounced as in *cat, rap,* etc., ...
> *aa* is sounded as *aw* in the word *lawn,*
> *e* is pronounced as in the English word *the,*
> *ee* as in *thee, me, see* etc.,
> *e* (with an acute accent) is to be sounded like *a* in *potatoe* and *day;*
> *i* is to be pronounced as in *sigh, fie,* etc.;
> *o* is to be sounded as in *so, go, flow,*
> *oo* as in *soon, moon,* etc.;
> *u* is never to be sounded as in the English word *flute,* its usual sound being that in French words *une, usage, usurier, fumer,* etc.,
> but when followed by a double consonant, or by two consonants, it is to be sounded as in English words *musk, lump, bump,* etc.;
> *y* is to be sounded in English words *holy, glibly, yonder, yellow,* etc.;
> *i* before another vowel has a full sound as in the English words *shine, riot;*
> *ei* coming together are to be pronounced as in *Leipsic;*
> *ou* as in *noun;*
> *oi* as in *toil,* etc.

In what follows, it is important to keep in mind that unlike each of the pure vowels in Indo-European words, and unlike the three vowel set in most of the Pama-Nyungan languages

(Crowley and Dixon 1981: 412), Palawa vowels probably had a fundamentally much more limited role in the Palawa Pleistocene dialects (§ 7.8.4). It is plausible to suggest that the primary function of vowels in Palawa Pleistocene was to link consonants as the initial and final segments in word elements, and as a corollary to thus define syllabic boundaries. The proposition can be extended to the semi-vowels when in initial position and performing the same role as consonants. A full exposition of the hypothesis cannot be expounded in this thesis, but it cannot be ignored if the following comments are to be fully understood.

Transcriptions of **<ae>**

Milligan was a Glaswegian (§ 4.1.13). Presumably his transcriptions of **<a>** in *cat / rap* etc. should be phoneticised as **/a/**, and not as **/æ/**, as **<a>** is now not infrequently pronounced in twenty-first century (south eastern) English, and very typically in twenty-first century (Australian) English. No transcriptions of Palawa words have been identified, which when compared with the comparable transcriptions of other European recorders, are clearly inconsistent with the surmise, and most accord with the surmise.

However, it can be noted that there are occasional Milligan transcriptions of **<ae>**. It is suggested that whilst they may represent transcriptions of **/æ/** as a single segment, there can be no certainty as to this. More confidently one can assert that **<ae>** as either a single segment, or as a vowel cluster, was / were an allophone of a number of segments including **/e/**, **/ɛ/** and **/a/**. At first sight a similar ambiguity arises with respect to the Robinson transcriptions of **<ae>**, but comparative analysis indicates that Robinson transcribed **<ae>** as separate segments in a vowel cluster. Table 7.5.1.3(a) provides examples. In the case of the words for *tooth / teeth* in particular, the table also strongly supports, even if it cannot conclusively prove, Milligan's observation with respect to the perplexing variety in the articulation of vowels. Bolding indicates the relevant segments.

Table 7.5.1.3(a)

SE: gar	**paege**	*teeth*	cf. SE: gar	**pagee**	*teeth*
			SE: fr	**pégui**	*dents*
			SE: fr	**pegui**	*dents*
			SE: br	**pe²gil**	*teeth*
			SE: rb	**beyge**	*teeth*
			SE: mj	**pay – ee – a**	*tooth*
			SE: fr	**puiguy**	*dents*
SE: gar	**nūe.bĕr.răe**	*eye*	SE: fr	**nuberé**	*yeux*
SE: gar	**braeve**	*oar / paddle*	SE: gar	**brave.vy**	*oar*
SE: mj	moona pungana	*fall of a tree* SE: mj	moona pungana		*fall of a tree*

Table 7.5.1.3(a) continues

E: mj	kaetta	*spaniel / dog*	_: wn	kitta	*English dog*
			E: sc	kuayetta	*dog*
E: mj	craekena	*sit down*	E: jj	crackenicka	*sit*
			SE: mj	crackna – nekah	*sit down*
E: mj	paruye noyemaeck	*leafless*	E: mj	poruttye – mayeck	*leafless*

Transcriptions of **<aa >**

It is convenient at this juncture to discuss and compare the very few transcriptions of **<aa>** in *Wordlist*. The Milligan transcriptions are limited to SE: <maantah> = *long way* (*Wordlist*: 207); SE: <layeté paawé> = *hill* (p.252); E: <kaawutto> = *afternoon* (p.431); W/NW: <pallawaa – royanah> = *black snake* (p.455); and E: <raalanghta> = *high wind* (p.470). Each of these words has one or more Milligan counterparts in which the corresponding vowel transcription is **<a>**. The counterparts are not necessarily inconsistent with his use of **<aa>** as a digraph which denoted the sound in English words such as *raw / wrought* etc. But Milligan also recorded E: <rawlinna> = *wind*. The transcriptions of **<aa>** by other recorders are also few, and none assist. Comparison of these transcriptions with apparent cognates suggests that the transcriptions usually denote **[a:]**, and as long vowels they evidence the loss of a pre-existing rhotic or retroflex. **<aw>** as a transcription is often ambiguous (§§ 7.6.2.1.2 and 7.6.2.1.2). Either Milligan transcription of **<aw>** is to be interpreted as the transcription of V + **<w>** in which **<w>** was either the bilabial semi-vowel, or else an approximant or similar; or as an inconsistent transcription of the digraph as in the English words for *raw / wrought* etc.

Transcriptions of **<é >**

The vowel so transcribed was invariably a final segment in Milligan words. There is a relatively large number of like French transcriptions, with the segment typically but not invariably in final position. Apparent cognates such as SE: mj <nubré> = *eye*, SE: gar <nūe.bĕr.răe> = *eye*, SE: ck <eve'rai> = *eye*, SE: fr <nuberé> = *yeux*, and SE: fr <nubra nuberai> = *yeux* are mutually corroborative, and confirm Milligan's observation that the segment transcribed was **[ei]**. As noted by Plomley, French transcriptions of **<ai>** in word-final position are synonymous (1976: 13). Most of these transcriptions appear in short disyllabic words, and it is suggested that the segment evidences the accenting of the final vowel in an atrophied word, coupled with a corresponding increase in the number of mora. If so, this suggests that transcriptions of an unaccented **<e>** by Milligan and the French denoted a sound which was similar to **[ɛ]**.

Transcriptions of **<i >**

Presumably both Milligan's references to <i> are to the diphthong [ai] as the final segment in a word, or as a diphthong followed by a consonant. When one considers how many English words incorporate <i> as a single vowel before a consonant, and the quite different, yet quite typical spelling conventions which then apply, one wonders if Milligan has accurately stated his use of <i> as a single spelling convention. The reference is to <i> in syllables transcribed as CiC in English words, in which the segment is usually a short vowel, and in syllables transcribed as CiCe in which the segment is typically a diphthong of the type adverted to by Milligan. One also wonders why he found it necessary to distinguish this diphthong from his transcriptions of <ei>. If he has accurately described the spelling convention adopted by him, then he would appear to have been remarkably inconsistent in his application of it.

In Table 7.5.1.3(b) the words in Part A illustrate his incorporation of <ei> and <i> as segments in ostensibly cognate words can all be reconciled as as the transcription of /ai/. The words in Part B seem to demonstrate an inconsistency. Thus in <cowintimy> = *beardless* (*Wordlist*: 105), an articulation of <win> as /wein/ is inconsistent with the same word element as transcribed by all other recorders, including in particular the French transcriptions where such an articulation is implausible. With respect to the articulation of <timy> in the words listed in Part C of the Table, the lexeme is a lexical suffix which typically denotes the absence of a usually present, and usually desirable trait or feature. It can be compared with the words for *no / never* listed under subheading <timeh> in *Wordlist* (p.329) and in Part C of the table. The interpretation of the vowel in words for *no / never* depends in part on Robinson's transcription of <i> in the same phonological context, a matter fraught with some difficulty (§ 7.8.1.2). But again it is rather implausible to suggest that the French transcriptions of <i> in apparent cognate lexemes did not transcribe either [i] or [i:]. In Parts B and C the relevant lexeme has been bolded to aid interpretation, tather than just the vowel under consideration.

Table 7.5.1.3(b)

Part A

E: mj	**neingheta**	*face*	cf.	E: gar	**nunehenar**	*face*
				E:mj	**niangté nepoony**	*wrinkle*
				E: mj	**niengheta elapthatea**	*fine face*
SE: mj	**kaneinah**	*mouth*		E: mj	**kakannina**	*mouth*
SE: mj	**leippetah**	*Larus pacificus*		SE: gar	**luebãydÿ**	*gull*
E: mj	**neingmenna**	*mother*		E: cr	**nin.ger.ma.ner**	*mother*
				SE:mj	**neeminah**	*mother*
E: mj	lyeemena kamei	*conceal kangaroo*		E:mj	**murkamiah**	*hide oneself*

Table 7.5.1.3(b) continues
Part B

SE: mj	co.**win.**timy	*beardless*	SE: mj	cow.in.timy	*beardless*
cf.					
SE: fr	**conguiné**	*barbe*	SE: fr	**conguinai**	*beard*
SE: fr	**coguiné**	*barbe*	SE: fr	**caguiné**	*barbe*
SE: fr	**coquiné**	*barbe*	SE: rb	**coguina**	*beard*
SE: br	**con[1]guina[1]**	*barbe*	SE: fr	**kongine**	*beard*
SE: gar	**go.gwin.ny**	*beard*			

Part C

SE:mj	payeeatimy	*toothless*	SE: fr	laidené	*tetons*
SE: fr	laïdené	*tetons*	SE: dr	laïdené	*sein*
SE: fr	laidiné	*teton*	SE: fr	laidené	*sein*
SE: br	**lal di[1]ne[1]**	*breast*	SE: fr	ladiné	*sein*
SE: fr	**ladinai**	*bosom*			

Table 7.5.1.3(b) Part C continues

SE: mj	lowatimy	*bachelor*	SE: mj	puggatimy pena	*coxcomb*
SE: mj	**timeh**	*no / never*	SE: mj	**timy**	*never*
W: gar	**timeme**	*no*	SE: gar	**timee**	*no*
SE: gar	**tīmĕ**	*no / never*	SE: mj	paroytimena	*leafless*
SE: mj	lowa puggatimy	*barren woman*	SE: gar	vage.ge **time.**pet.ther.rer	*fool*

The confusing picture presented justifies some additional comments. Comparative analysis usually bears out Milligan's use of **<i>** as the first vowel in vowel clusters such as **<ie>** and **<ie>** as transcriptions of a diphthong which approximated to [**ai**]. On this basis a plausible phonetic transcription of E: mj <wieninnah> = *elbow* is /waiɛninna:/. Milligan also transcribed <wayeninnah> as a counterpart in (south) Eastern speech. Its phonetic representation on the basis of Milligan's notes is /wajɛninna:/. The change in pronunciation can be interpreted in different ways. Hypothetically the semi-vowel could evidence anaptyxis. However, unless other words, including words transcribed by other recorders, consistently exhibit the same pattern of change, the variation more probably evidences one of the variations in pronunciation commented on by Milligan. In other words, there were several pronunciations of a vowel cluster, all of which were allophonic. A consistent pattern of the type illustrated has not been observed. The salient point is that the transcription of <wayeninnah> does not contradict Milligan's statement with respect to the spelling convention adopted by him, and in fact it corroborates his statement. However, his provision of two separated statements with respect to the articulation of **<i>**, and his separate treatment of **<ei>** (see below) in a way which does not readily distinguish it from his transcriptions of **<i>** suggests not so much variations in the Palawa articulation of a diphthong, as inconsistencies on his part in the recording of Palawa

words. His vocabulary was recorded over a number of years (§ 6.1.13), and his own description of the spelling conventions used by him may reflect an an attempt on his part to rationalise the use of different conventions to record the same sound.

***Transcriptions of* <ei>**

Assuming that there was a need to distinguish between the articulation of <**i**> as explained by Milligan, and the articulation of a segment transcribed as <**ei**>, that need is not understood, particularly in the context of Milligan's own statements with respect to the 'laxity' observed by him in Palawa pronunciation of the vowels (§ 7.4.1). Part A of Table 7.5.1.3(c) lists a number of words transcribed by Milligan which suggest that his transcription of <**ei**> was not always consistent with his statement that it was a diphthong as distinct from a vowel cluster. The Robinson words listed in Part B suggest even more strongly that in <**nei**ngmenna>, and probably in some other words, Milligan's transcriptions of <**ei**> were in fact used to record segments which he had idenified as a vowel cluster. The examples provided also raise similar questions as to whether his transcriptions of <**ee**> always recorded [**i:**] as stated by him. The matters raised will be revisited in the discussion of Palawa vowels in § 7.8 and following, and in particular in § 7.8.1.1. In the Table, bolding indicates the relevant segments.

Table 7.5.1.3(c)

Part A

E: mj	**nei**ngheta	*face*	cf.	E: mj	**nie**ngheta elapthatea	*fine face*
				E: mj	**nie**nghé nepoony	*wrinkle*
SE: mj	kan**ei**nah	*mouth*	cf.	E: mj	kakannina	*mouth*
SE: mj	**nei**ngmenna	*mother*	cf.	SE: mj	**nee**minah	*mother*

Part B

SE: gar	**nee**n.nÿ.nŏg.gí	*mother*	W/NW: mj	**nee**na moygh	*mother*
SE: gar	**nee**n.ni	*mother*	SE: gar	**nee**ni	*mother*
SE: gar	**nee**.gy	*mother*			
E: gar	n**e.er**.men.ner	*mother*	E: gar	**neer**.men.ner	*mother*
N: gar	**num**.by	*mother*	NE: cr	n**e.num**.bi	*mother*

***Transcriptions of* <u >**

Milligan defined three sounds, which ostensibly form a set of vowel alternations. In effect he states that <**oo**> transcribes /**u:**/; <**u**CC> denotes /**u**/, and after identifying <**ou**> as a diphthong he appears to state that all other transcriptions of <**u**> denote the rounded form articulated in

French words such as *une, usage, usurier, fumer,* etc. For present purposes I will phoneticise this last segment as **/ü/**. No problems arise with respect to his transcriptions of **<oo>**, except to remark that the other recorders, and the Robinsons in particular, used transcriptions of **<oo>** to denote geminate vowels (§ 7.8.1.1).

With respect to the articulation of <u> when followed by a consonant cluster, it is again observed that Milligan was a Glaswegian (§ 4.1.13). Accordingly, it is likely that his pronunciation of the vowel in *musk / bump / lump,* the exmples given by him, were articulated as **/ʌ/**, and not as **/a/** as it typically is in twenty-first century (south eastern) and (Australian) English. If I am wrong as to this, then he failed to identify a high back rounded vowel in any of the numerous words he recorded, or else failed to note a distinction between high back rounded vowels and low back rounded vowels.

Milligan's reference to **/ü/** as a segment is puzzling. None of the other recorders, including notably the French explorers and Gaimard, make any reference to such a sound. Nor does Jorgenson, who presumably was familiar with the umlaut in German (§ 6.1.11). For what it is worth, the sound was not, so far as I am aware, regularly articulated by the nineteenth century speakers of the Pama-Nyungan languages of south eastern Australia. The segments so identified by Milligan may have been palatalised consonants followed by **/u/**. A further possibility is that the vowel identified had been assimilated by umlaut to a back vocalic segment. I have attempted to test the hypotheses by reference to transcriptions of word elements in the forms C**yu**(C), C**iu**(C) and C**eu**(C). The investigation has not been limited to Milligan transcriptions. With respect to transcriptions in the form <C**yu**(C)>, there is one only, viz SE: mj <pooar**yu**mena> = *waist* (*Wordlist*: 125). It is an apparent cognate of SE: mj <pooar**iu**mena> = *waist.* There are no other comparable words. Some apparently related words for *belly / abdomen / flank* under the subheading <pol.lone.ner> (*Wordlist*: 124-125), were recorded by Robinson and Millligan. I am unable with any certainty to determine the syllabic boundaries in <pooaryumena>, which means that no completely satisfactory inferences can be drawn. With respect to transcriptions in the forms C**iu**(C) I have identified the words listed in Table 7.5.1.3(d). Many more words in the form C**eu**(C) have been identified and about one-fifth of these words have been placed in the table. They are all associated with a large number of words which do not evidence either palatalisation or umlaut. As a result, very few completely safe inferences can be drawn. In <pane.tar.lo.**te.uck**> and <no.go.**the.uck**> the bolded suffixes present as cognates of <**yack**>, and if so are reflexes of *tyak as a pejorative qualifier. Be that as it may, the proto lexeme in that case evidences palatalisation of an apico-alveolar stop

(§ 7.6.7.1), as ostensibly so do the words referred to. In the table, bolding indicates the relevant segments.

Table 7.5.1.3(d)

E:jj	miulcan	*belly*	SE: fr	liué	*navel*
E:jj	liuropony	*boat / ship*	-: lh	catribiutana	*dry*
-: lh	liutcce	*low*	E: mj	kiuntah	*waratah*
SE: fr	driué	*leaf*			
SE: rb	leurina	*leg*	W: cu	peune	*toe*
SE:jj	bringdeu	*eyebrow*	NE: cr	pane.tar.lo.te.uck	*cranky*
NE: cr	no.go.the.uck	*no good*	E: mj	meunna	*bill* (of bird)
-: bk	leucropene	*boat / ship of one mast*	E: jj	luirapeuy	*boat*
SE: rb	leuena	*boy*			

Schwa

It is not clear whether Milligan distinguished schwa from other unaccented vowels. A cursory examination of *Wordlist* indicates that the Robinsons transcribed **<ner / er>** as unstressed word elements in following positions, and in particular as a final word element. As a spelling convention to indicate schwa, **<er>** was commonly employed in the early nineteenth century (Jones 1927: passim), as it still is today (Crystal 1995: 255). The equivalent transcription by Sterling was <ĕr>, and by Milligan, at least in final position in final word elements, would appear to have been **<a>** and less frequently **<e>**. Thus E: **gar** <mun.**yer**> = *porcupine*, can be compared with E: **mj** <mungyenna> = *ant – eater / porcupine*. Both the Robinsons and Milligan more rarely transcribed an apparently unaccented **<e>** in the same position. Milligan's transcription of **<é>** in final position was deliberate, and probably evidenced stressing of the syllable and/or accenting of the segment (§ 7.5.1.3). Whether he transcribed schwa as a medial segment is more difficult to determine. A comparison of E: mj <riena – **aoota**> = *left hand* (*Wordlist*: 86) with SE: mj <'**ngo**tta> = *left hand* suggests that in the former word the lengthening of the vowel resulted from stressing or accenting, and in turn led to lenition of the dorso-velar nasal. It is therefore suggested that in **<aoota>** the nasal was replaced not by **<a>** as segment, but by a schwa identified by Milligan as an [a]. This in turn suggests that in appropriate contexts, other Milligan transcriptions of **<a>** may also have denoted schwa, rather than [a].

§ 7.5.1.4 Summation

Whatever view is taken of Milligan's transcriptions, none of them are very flattering to him. Admittedly he was probably a busy civil servant. Admittedly too, the destruction of the Palawa languages including their ongoing destruction at Wybalenna would have affected the quality of the materials provided by his Palawa informants. Notwithstanding his allusions to French and German pronunciations, the suggestion that he had no real familiarity with any second language (§ 4.1.13) may be correct. In particular his transcriptions of vowels must be treated with great caution, and they rarely provide a reliable base for comparison with the transcriptions of others. Semantic analyses of many of his words will advance matters, but probably never to the extent that definitive phonetic representations can be provided. There is not the same reason to assume that the Robinsons, Sterling, Jorgenson, and the French recorders as the other major recorders were so inconsistent, nor as illogical in the spelling conventions they applied. Nor for that matter any of the other recorders; but the data with respect to many of them is too small to enable firm conclusions to be reached.

§ 7.5.2 Walker

Between 1888 and 1899 James Backhouse Walker, the son of George Washington Walker, read a number of papers to the Royal Society of Tasmania. The papers were collected and reprinted by the Government Printer on a number of occasions (Walker 1902), and include *Notes on the Aborigines of Tasmania extracted from the manuscript journals of George Washington Walker.* Under the heading 'Pronunciation' (p. 255), notes on the pronunciation of a number of vowels and a segment transcribed as <y> are provided. The notes are usefully followed by the Walker vocabulary in a form which preserves the stress and accenting marks used by him. Both Walker and his companion James Backhouse were born, reared and for most of their lives, lived in England's northern Midlands. The Palawa vocabularies recorded by them were compiled on a visit to Wybalenna, Flinders Island (§ 4.1.4). Walker's notes do not cover the field. This subsection will concentrate on the segments referred to in the notes. Generally speaking, other segments transcribed in the Walker and Backhouse vocabularies will be discussed as and when appropriate later in this chapter.

Stressing and Accenting

Walker's own note reads 'The syllables marked with a long line above are those on which emphasis should be placed'. <tywēh rāttynēh> = *the wind blows* is a typical example. Syllabic boundaries were not indicated by Walker, and although the line is placed over vowels only, and

not the full syllable, Walker seems to have assumed that people perusing his vocabulary would recognise the syllabic boundaries. The marks as reproduced in *Wordlist* are identical with those reproduced in respect of the words recorded by the Robinsons, Cunningham, and Sterling. As in the case of these recorders, the marks indicate the regular stressing of the first element in words, and generally speaking either no stressing of any of the remaining elements, or at best secondary stressing. Backhouse did not so mark the words placed by him in his vocabulary.

Consonants

Walkernotes state 'Other sounds according to English modes of spelling.' Although not in my copy of the Walker Memorial Volume, Plomley gives *ng* as in *long* from the manuscript. A perusal of Walker's vocabulary indicates that;

- Transcriptions of <g> always represent [g]. Neither Walker nor any of the other recorders used either <ge> or <j> to transcribe affricates.
- [k] was transcribed as <c>, <k> and <ck>. No difference in the sounds denoted would appear to have been intended.
- Initial <f> in <famennolunny> = *they /them* would appear to have been a copying error. Plomley records the word for both Backhouse and Walker, but transcribes it as <namennolunny> in both cases. This accords with the transcription of other Palawa pronouns (*Wordlist*: 361-364).
- The lack of comment with respect to the pronunciation of <t> and <d> as segments, suggests that the segments recorded were apico-alveolar and post-alveolar stops (§ 7.6.3.3).
- <th> was a digraph which identified a lamino-dental stop as a single segment.
- The status of <ty> is uncertain. It is rarely followed by a vowel. The transcription of <pōtŷă> = *no*, and the transcriptions of the same word by others (*Wordlist*: 329) evidences palatalisation of an apico-alveolar stop (§ 7.6.7.1), particularly in word-final position where it presents as a lamino-palatal stop. On this basis it is inferred that Walker transcriptions of <y> are to be interpreted in the same way as Milligan's transcriptions (§ 7.5.1.2).

Transcriptions of <y> in initial position

In a few words <y> appears as the initial segment in a word or word element. <yāněh> = *teeth,* is an example. In four words it is transcribed as the final segment, and in three of these it is marked with '˘'. In the fourth it is unmarked. More frequently it is a medial segment which always follows a preceding consonant. In this position it is sometimes marked with ' ¯ ', sometimes with '˘', and at other times it is unmarked. In other words Walker would appear to have adopted the same spelling convention as Milligan (§ 7.5.1.2). On this basis it is inferred

that in Walker's perception all transcriptions of <y> identified the same clipped sound, that they do not transcribe a diphthong. As already noted, in some contexts they may evidence the palatalisation of the preceding consonant.

Vowels

As has Plomley (*Wordlist*: 29), I have taken the liberty of rearranging Walker's notes to make their effect clear.

a	*ah* as in English *bar* as a long sound as in English *pale*
au	as in *ball*
e	*e*.
eh	as in English *left*. (Plomley also gives "as in *hammer*").
i	*i*.
o	*o*
u	as in *you* (It is not clear whether the example given denotes **/u:/** or **/ju/**).

Unlike Milligan's notes on the pronunciation of vowels, Walker's notes are more simply expressed, more logical in their choice from the available spelling conventions, and ostensibly always consistent with his transcriptions of words. It is noted that Walker's transcriptions and the very similar transcriptions of Backhouse display a much smaller range of vowels than do more prolific recorders such as the Robinsons, Milligan, Jorgenson, and the French maritime explorers. This may be a reflection of the shortness of the vocabularies recorded by them. With some minor exceptions, Backhouse would appear to have adopted the same spelling conventions. The following differences are noted, and usually have a general application:

- Transcriptions of <**ā**> by Walker, were recorded as <**ah**> by Backhouse. As an example compare wb <pānēh pēkĭnnĭnnēh> = *little boy* with Backhouse's <**pah**napakennenna> = *little boy*. This and other like transcriptions suggests that Backhouse employed <**h**> as part of a digraph which indicated a preceding long vowel.
- Transcriptions of <ĕh> by Walker were recorded as <**a**> by Backhouse. As an example compare wb <kythĭnnĕh> = *skin / hair* with bk <kythinna> = *hair*. Speculatively this suggests that Walker employed <**h**> not as a digraph, but to indicate 'colour'.
- All other differences noted relate to the transcriptions of short vowels. The hiatus in an expression transcribed by Walker as two words was recorded by Backhouse as one word with <**a**> substituted for the hiatus. See the words for *blood* under subheading <trehnytha> in *Wordlist*, page 167.

§ 7.6 Consonants

The range of Palawa consonants and semi-vowels, was as set forth in Table 2.7 (p.25). The standard format in such representations has been departed from in some respects because of the difficulties encountered in interpreting many of the segments, either in particular contexts, or in a few cases even at all. Segments with question marks indicate that the presence of the segment is suspected, but not established. Technical difficulties have prevented the use of a number of conventional phonetic symbols. Accordingly, in the case of a number of consonants digraphs have been used. To provide complete clarity the second symbol in each digraph has been placed in superscript position. In the case of rhotics, the symbol for the approximant was not available, and [ř] has been used in its place. Tapped rhotics are transcribed as [$\mathbf{r}^{\mathbf{r}}$]. Technical difficulties have also prevented the reproduction of "ˆ" as the diacritic used by Robinson and others in transcriptions of <y> as a part of a palatised segment, and/or as a segment of less than one mora in length. The transcriptions have been reproduced as <ŷ>.

§ 7.6.1 Nasals

Crowley and Dixon summarise the Palawa evidence as interpreted by them as follows:

> It is characteristic of (the) Australian languages that there is a nasal corresponding to each stop. The Tasmanian corpus provides clear evidence for four nasals... There is no real evidence for a lamino-dental nasal. But this is a sound which is difficult to distinguish from [n], for someone who does not have the contrast in his native language, and we could scarcely expect the sources for Tasmania to show it (1981: 410).

My detailed comments will be provided as the various segments are discussed in the following subsections.

§ 7.6.1.1 Dorso-velar Nasals

There is ample evidence of the articulation of the dorso-velar nasal in word-initial position in Palawa words. Examples can be viewed in Part B of Table 7.6.1.1. There are only a few transcriptions of <ng> as the initial segment in following word elements, but its presence can at some other times be inferred (see below). For some examples of its articulation in following elements see the words listed in Part A of Table 7.6.1.1. Likewise, much of the evidence for the presence of the nasal in word-initial position is indirect evidence. Milligan transcribed the nasal in two different ways, viz in the form <'ng> (for example SE: mj <'ngotta> = *left hand*), and as a cluster of segments (for example ***Unghanyaletta*** (Mount Wellington)). The segment is not articulated in initial position in either English or French, and perhaps partly as a result of its different articulation when preceded by a vowel (Crystal 1995: 245) was unfamiliar to the

Europeans. Transcriptions by French and English speakers (including Milligan) indicate a general difficulty on the part of the Europeans in identifying the true nature of the segment. With two exceptions, viz SE: rb <**ŋ**ganana> = *emu,* and SE: rb <**ŋ**garana> = *white cockatoo,* Milligan alone would appear to have recognised the segment as a dorso-velar nasal in word-initial position. The difficulty would appear to have been exacerbated by variations in the articulation of the nasal by the Palawa themselves. That surmise is indirectly supported by the paucity of Palawa words so headed, when compared with similarly headed words in the nineteenth century languages of south eastern Australia. It is more directly supported by the fact that the transcriptions by the same recorder are at times in different forms. For examples see the differing transcriptions of the nasal by Milligan in Part A of the Table. Comparisons of groups of otherwise apparent cognates indicate that articulation of the nasal decayed, and as a result it was preserved in a number of differently lenited forms, and at other times was lost altogether. In contrast, eclipsis of other consonants as initial segments in Palawa words was an extremely rare phenomenon. The evidence for lenition and/or indistinct articulation includes a number of transcriptions of what are ostensibly clusters of segments. Part A of the Table provides examples. Transcriptions of <**n**> in contexts which suggest that the segment was once articulated as [**ŋ**] provide further evidence (Part B), as do transcriptions of <**g**> (Part C) and <u> (Part D). Evidence for eclipsis is provided in Part D, and identified by <**ø**>. To fully appreciate the strength of the various surmises advanced, a large number of potential examples need to be viewed, and reconciled. The following references are by no means exhaustive, but apparent cognates which comfortably fit the hypotheses and have [**ŋ**], [**g**] and [**n**] as their initial segments can be viewed in *Wordlist* on pages 99 (*head*); 130 (*brain*); 139 (*sand*); 141-142 (*cockatoo*); 223-224 (*fire*); 442 (*true / correct*). There are other words which have [**h**] as a lenited form of [**ŋ**] as their initial segment. As a general proposition the great preponderence of words in *Wordlist* with a vowel in word-initial position have apparent cognates in which [**ŋ**], [**g**], [**h**] or [**n**] are recorded as their initial segments. See, for example, the words for *hand* sublisted under <han.ne.rme.kar.len.ner>, <han.ner.min.ner>, and <treen.ner> (*Wordlist*: 85 and 86). In the Table, bolding indicates the relevant segments

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Table 7.6.1.1

Part A

W: gar **k**noi.kar	*crawfish*	cf.	W: gar	**n**oi.kar	*crawfish*
			SE: fr	**n**uélé	*homard*
			-: sn	**n**ūeběr	*crawfish*

Table 7.6.1.1 continues

E: jj	engenama	*eaglehawk*		-: lh	ingenana	*eaglehawk*
SE: mj	rullai ungaratiné	*ice*		E: mj	me — inghana	*back*
E: mj	ongheewammena	*ask*		SE: mj	oghnamileé	*ask*
NE: cr	oyernipare	*tell me*		E: mj	ouneeprapé	*answer*
SE: mj	oanganah	*tell me*				
E: mj	ne - ungalanitta	*tarantula*				
E: mj	me — inghana	*back*	cf.	E: gar	meen.nen.er	*backbone of kangaroo*
E: cr	mea.ing.er	*back*	cf.	E: cr	meang.en.ner	*backbone*
SE: mj	'nganee	*halt* (lame)	cf.	E: mj	ungunnick	*halt* (lame)
SE: fr	mata enigo	*cela fait mourir / cela donne la mort*				
SE: fr	mata nigo	*cela donne la mort / il va mourir*				
SE: fr	matanigo / motanigo	*il va mourir*				

Part B

SE: mj	'ngotta	*left hand*	cf.	SE: gar	nore.der	*left-handed*
SE: mj	'nguna	*sand*	cf.	SE: gar	nune.ner	*sandy beach*
SE: mj	'nghara	*white cockatoo*	cf.	SE: gar	narrar	*cockatoo*
SE: mj	'ngawah	*Larus pacificus*	cf.	W: gar	nowwer	*gull*
Bur.nang.ye / Kur.nang.ye		Mount Wellington	cf.	*Unghanyaletta*		Mount Wellington

Part C

SE: mj	'nguna	*sand*	cf.	SE: fr	gune	*sable*
SE: mj	'ngunannah	*emu*	cf.	SE: gar	gon.nan.ner	*emu*
E: mj	'ngonyneeleebya	*true*	cf.	E: mj	gonyneealeebya	*true*

Part D

SE: mj	'ngotta	*left hand*	cf.	W/NW: mj	ŋoottamutta	*left hand*
SE: mj	'nghay rumna	*black cockatoo*	cf.	N/NW: jj	ŋeribba	*cockatoo*
SE: mj	'nghara	*white cockatoo*	cf.	SE: mj	ŋoorah	*white cockatoo*
SE: mj	'nguné	*spark/ fire*	cf.	SE" rb	ŋounae	*fire*
				SE: gar	ŋūe.nĕe	*fire*
				W: gar	ŋuen.nee	*fire*
				SE: fr	ŋunai	*feu*
E: mj	'ngonyneeleebya	*true*	cf.	E: mj	ŋonnyneealeebyé	*correct*

As a segment the dorso-velar nasal is more common in a final position. In this position its articulation presumably corresponded closely with its articulation in English words, and accordingly the English recorders had no great difficulty in identifying the sound.

Phonological Developments

The evidence which suggests that dorso-velar nasals in initial position were at times indistinctly articulated, probably also evidences a general and continuing tendency in the Palawa languages which resulted in lenition of the nasal in initial position, and ultimately in many words its complete loss. The most typical replacements following lenition were [k/g] and [n]. By way of

contrast, it is suggested that [**w**] and/or [**u**] (<**u**>) as a replacement, when it followed loss of the nasal, was epenthetic. See the examples already given. There is no evidence of the replacement of the nasal in initial position by fricatives.

Comparative analysis suggests that the final segment in word elements in many proto Australian words was a dorso-velar nasal (§ 7.6.8.1). Unlike the Pama-Nyungan languages, dorso-velar nasals in word-final position are very rare, and it would appear that it was either lost, or that its articulation changed. In many Palawa words the final segment is <**k/g**>, and the other segments typically found in final position are [**n**], [**m**], [**j**], and vowels. Plausibly each of these segments was the product of lenition, or some other pronunciation shift. But a discussion of the phenomenon would involve a consideration of the role of rhotics as segments when they preceded the nasals, and is best deferred to § 7.6.8.1.

§ 7.6.1.2 Lamino-dental Nasals

Crowley and Dixon state (1981: 410):

> There is no real evidence for a lamino-dental nasal. But this is a sound which is difficult to distinguish from [**n**], for someone who does not have the contrast in his native language, and we could scarcely expect the sources for Tasmania to show it.

I agree, and have nothing to add.

§ 7.6.1.3 Lamino-palatal Nasals

Transcriptions of <**neV**> and <**ny**> are common, particularly the latter, and they appear in word elements in both initial and final position. In Robinson transcriptions, <**ny**> often constitutes a word element in itself. When the <**y**> is marked for stress and/or accenting, the mark used indicates a short, unaccented sound (§ 7.9). The form of the transcriptions thus points to a palatalised nasal (§ 7.6.1.1) which in <**neV**> may evidence later dissimilation. Table 7.6.1.3 provides examples.

There is no clear evidence to the effect that the palatisation (including labiovelarization) of a consonant was used to provide a contrast with a non-palatised counterpart. But later dissimilation of palatised consonants sometimes produced segments which were contrastive, but the comment has no known application to lamino-palatal nasals. In fact the words for *fire* sublisted under <'ngune> (*Wordlist*: 224); *beach* sublisted under <nune.ner> (p.139); *black cockatoo* sublisted under <nearipah> (p.142); and *shark* sublisted under <'ngūnna> (p.451) suggest that lamino-palatal nasals and dorso-velar nasals were allophones. (The list of examples

provided is not exhaustive.) Further evidence for the surmise is probably provided by the words for *opossum* listed under <nuenghelongeter> (*Wordlist*: 305), <neeth.en.er> (p.305), and <now.win.ner> (p.306); and other groups of words which presumably once had a dorso-velar nasal in word-initial position.

In Table 7.6.1.3, bolding indicates the relevant segments. It is suggested that the transcriptions of **ny**V and **ne**V evidence a palatised nasal, and that the bolded segments in the compared words evidence either a palatised nasal, or the dissimilation of a palatised nasal.

Table 7.6.1.3

-: wb	nyl**ĕ**h	*eyelash*				
	***Ny**.ker*	Mount Norfolk	cf.	SE: j j	neika	*hill*
					***Noy**.he.pun.net.tera*	Waterhouse Point

Table 7.6.1.3 continues

E: gar	neunnar	*louse*	cf.	SE: fr	nouré	*poux*
-: sn	nēunār	*flea*	cf.	W: gar	noeng.en.er	*louse*
SE: mj	tayene nyelutera	*exchange*	cf.	NE: gar	tree.wer.nel.yer	*I'll give you this*
SE: gar	ween.ny	*elbow*	cf.	E: cr	we.nen.ner	*elbow*
				SE: mj	wiena	*elbow*
SE: gar	treen.ny.vuth.er	*thumb*				
E: mj	leoonyana	*left leg*	cf.	E: gar	lue.gen.ner	*leg*

§ 7.6.1.4 Apico-alveolar Nasals

Cross-linguistically the articulation of apico-alveolar nasals in initial, medial and final positions is well evidenced. The south eastern Australian and Palawa languages are no exception. What is of interest is the fact that comparative analysis indicates that in Palawa most, if not all, apico-alveolar nasals in word-initial position reflect the replacement of other nasals, or else are consistent with such a surmise.

As noted in § 7.6.1.1, when [**n**] is transcribed as the initial segment in a word element, comparative analysis usually reveals that its genesis lay in the lenition of a dorso-velar nasal. The Palawa words for *fire, beach, black cockatoo* and *shark* illustrate the point. It will be observed that as well as [**n**], [**k/g**] and eclipsis of the dorso-velar nasal were also products of the lenition. Part A of Table 7.6.1.4 provides examples of the replacement of [**ŋ**] by [**k/g**].

Mara words are often distinguishable from Nara words (and when derived from Nara words, words in (south) Eastern speech) by reason of the fact that the former have [**m**] in word-initial

position, whilst their Nara and (south) Eastern speech potential cognates have [**n**] in word-initial position. The change is illustrated by the words for *devil / demon* etc. sublisted under <nammeberick> (*Wordlist*: 202). It is also illustrated by the words for *ground* sublisted under <man.en.ner>, <nar.ti> and <neem.er.ran.ner> (pp.244-245) and for *mud* sublisted under <man.en.ner> (p.325) in which the (south) Eastern speech words probably had Eastern speech progenitors. Part B of Table 7.6.1.4 provides further examples, and also illustrates that the change was not completely confined to Nara words. The ostensibly Northern speech word with initial [**m**] was probably a Mara word, and its counterpart with initial [**n**] a loan word (Plomley 1976: 77). There are in fact a very large number of Nara and (south) Eastern speech words in which <n> was transcribed as the initial consonant. A number of examples were provided for other purposes in Part B of Table 4.3.6 as part of a discussion of words for *hand*. These examples evidence the change to [**n**] in word-initial position, and the preservation of [**m**] both in items, and when marginalised, as in the word for *five*. It will be suggested in § 7.9 that the change was triggered by a reduction in the accenting of <**m**> in word-initial position. The foregoing comments apply to a large number of place names in Nara regions. Without in any way providing a comprehensive list of references, other examples can be viewed in the relevant sets of words with [**m**] and [**n**] in word-initial position as listed in *Wordlist* for *hand* (p.87); *bellyful* (p.140); *mutton bird* (pp.151/152); *clean* (p.184): *dead* (p.198); *dead man's house* (p.199); *devil* (p.202); *fall* (p.217); *father* (p.218); *give* (p.236); *good / good spirit* (pp.240 / 242); *green* (p.244); *hill* (p.252); *hot* (p.256); *grub* (p.263); *louse* (p.266); *shell* (p.273); and *to lie* (p.286).

In Table 7.6.1.4, bolding indicates the relevant segment(s). **ø** indicates the loss of a relevant segment. In Part A, the words in the first column either fully preserve the dorso-velar nasal, or in the case of <ewinka> is ambiguous in this respect. In Part A the compared words evidence lenition, with in some cases eclipsis followed or accompanied by either anticipatory assimilation, or by epenthetic alliteration.

Table 7.6.1.4

Part A

E: mj	mientongka	*tumble*	cf.	E: mj	mientonka	*tumble*
NE: cr	oung.ke	*doe forester*	cf.	NE: gar	trung.er.ner	*forester kangaroo*
				NE: gar	trun.han.ner	*female tarrer*
NE: gar	lang.kar.ner	*dance*	cf.	SE. mj	rialangana	*dance*
				SE: gar	dry.vĕ.hŷ.lāg.gĕr.nür	*dancing*

Table 7.6.1.4 continues

NW: JJ	cwinka	*head*	cf.	NW: jj	ewucka	*head*
E: gar	nonk.hc.yar.nar	*face*	cf.	E: sc	nepoogamena	*face*
-: sn	nĕunkĕnăr	*face*				

Part B

E: gar	mine.ner	*knee*	cf.	W: gar	none.ner	*knee*
E: cr	mine.ner	*knee*		NW: gar	none.ner	*knee*
E: mj	mienna	*knee*		W: cr	no.ner	*knee*
-: lh	minebana	*knee*		NE: cr	ner.na.pen.ner	*knee*
				E: jj	nannabenana	*knee*
				-: sn	nārnerpenner	*knee*
				NE: gar	none.ner.pee	*knee*
N?: gar	mip.per.ren.er			N? : gar	nip.per.ren.er	*knee*

When [**n**] is transcribed as a medial or final segment in words, the change almost invariably evidences the lenition of a dorso-velar nasal (§ 7.6.8.1). When the affected segment is the initial segment in a following word element, the change also evidences eclipsis of the original segment in the following word element, followed by epenthetic alliteration (§ 7.6.8). Very typically the eclipsis and lenition is evidenced by the presence of geminate nasals that straddle a syllabic boundary. Each of the words for *lips* (*Wordlist*: 109) evidences the points made. Some words for *ear* (p.l 13) provide further examples. Compare E: mj <mu**n**genna> with E: gar <mur**n**.ner>, and E: gar <pla**n**g.er.row.hane.ner> with -: bk <ple**nn**errehwu**nn**eh>.

§ 7.6.1.5 Bilabial Nasals

There is no reason to think that transcriptions of **<m>** do not in all cases denote the bilabial nasal. Cross-linguistically, pronunciation shifts from the voiced bilabial stop [**b**] to the bilabial nasal [**m**] are well evidenced (§ 7.1.1.1). The same change is well evidenced in the Palawa lexicons. The changes involved the stop in all initial position. When transcribed in word-initia position, it probably evidenced a semantic change. As the initial segment in following word elements, the transcriptions more often, but not invariably, evidenced a pronunciation shift. That both types of change took place is explained in § 7.6.8.2, and illustrated by its accompanying table. But it is beyond the scope of this thesis to identify at this stage which transcriptions evidence pronunciation shifts, and which semantic changes. For present purposes examples are provided in Part A of Table 7.6.1.5.

As a segment in word final-position [**m**] appears in five words only in the ordinary lexicons, and marginally a few more in place names. Comparative analysis indicates that in all of these

words the change had its genesis in a shift from [**n**], and never from [**b**]. The words are listed in Part B of Table 7.6.1.5. Similar comments apply to its presence as the final segment in word elements. In this context it usually evidences anticipatory adoption of the voicing of the segment which heads the following word element.

A tendency for [**m**] in word-initial position to change to [**n**] in Nara words was noted in § 7.6.1.4. The words listed in Table 7.6.1.5 are not inconsistent with that proposition. The words in the first column provide examples of words which when formed incorporated a bilabial stop, and in the second column the shift to a bilabial nasal. Bolding indicates the relevant segment(s).

Table 7.6.1.5

Part A

SE: fr	beguia	*doigt*	cf.	-: wb	mēkkĕh thinnĕh pēppŷnĕh	*finger*
E: mj	poimena	*hill*		W: gar	ny.bune	*hill*
SE: jj	teeboack	*small*	cf.	NE: cr	dear.ne.re.pare	*little*
SE: rb	cacbennina	*spittled*	cf.	SE: mj	kamena meena	*spit*

Pane.run.ner	Henty River	cf.	*Moor.ron.noe*	North Esk
			Nay.rim	St.Clair Ck.
Par.mone.er	Inglis River		*Mar.poe.yer Men.nan.yer*	Wye River
			Nar.moo.row.er.dim	unnamed river near Bluff Hill
Boo.be.al.ler	Great Musselroe River		*Mueth.min.ner*	Pipers Brook
			Nib.ber.lin	Derwent River

Part B

E: mj	rogounim lienya	*brow*
SE: mj	gunnyem waubberaboo	*by and by*
E: gar	tryerworum borroke	*bellyful*
E: mj	pagra! kum leah!	*woe's me*
-: gar	true.de.cum	*sing / dance*

Roeinrim	cf.	*Roin.en.run*	Mount Heemskirk
Runt.te.kar.dim.mer		*Run.te.kun.dim*	place N of the Arthur River
Roy.en.rim	cf.	*Royenrine*	Pieman River

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§ 7.6.2 Rhotics and Laterals

In comments which provide some general comparisons with respect to the Palawa and Australian Aboriginal languages, Crowley and Dixon state (1981: 415):

> The second significant difference from the Australian languages concerns the high frequency of the laterals and rhotic(s) in syllable-initial position. Most Australian languages do not have laterals or

> rhotics in word-initial position; if they can occur in this slot only a very small number of words will begin with a segment of this type. And on the mainland a lateral or rhoticmay be the first, but scarcely ever the second, member of an intervocalic cluster. In Tasmanian the rhotics and specially the lateral occur at the beginning of many words, and can occur at the beginnings of many words, and can occur as the second element in an intervocalic cluster. The occurrence of a few initial clusters in Tasmanian is another, more minor, point of difference; initial clusters are rare in Australian languages but where they do occur .... they generally involve a stop plus lateral or rhotic, as in Tasmanian.

I agree with these observations insofar as they apply to the Palawa languages. On page 414 Crowley and Dixon suggest on the basis of about 800 reconstructions that 17 per cent of Palawa words have a lateral in word-initial position, 6 per cent a tapped rhotic, and 1 per cent an approximant. The number of words with laterals in word-initial position well exceeds the number of words with rhotics in word-initial position. There are very real difficulties in distinguishing tapped rhotics from approximants in word-initial position (§ 7.6.2.1.1). I disagree with the surmises relied upon by them to so distinguish transcriptions of the rhotics (1981: 410-411; §§ 7.6.2.1.1 and 7.6.2.3), and think that in this respect it impossible to arrive at any reliable percentages. I am not in a position to comprehensively comment on the Pama-Nyungan languages, but it is relevant to note that in the Aboriginal-English word index of *Macquarie* there is a marked paucity of Aboriginal words with laterals and rhotics in word-initial position, and that in Woiwurrung there are no words with rhotics in word-initial position, and only a few with laterals (Blake 1991). A full discussion of the reasons for these disparate phenomena is beyond the scope of this thesis, and will have to be deferred until an etymological analysis of words and word elements is provided. However, the comparative analyses which follow to some extent explain, and in any event support, most of the Crowley and Dixon observations.

§ 7.6.2.1 Rhotics Overview

In any discussion of the rhotics as segments, and with respect to their genesis and place in phonological progressions, it is often important to distinguish between tapped rhotics and approximants. Only very rarely do either English or French spelling conventions ever enable tapped rhotics and approximants to be distinguished in transcriptions, and it is entirely possible that the European recorders were simply not sensitive to any need to distinguish between the two types of segments in their transcriptions of words. Certainly none of the recorders used any digraphs or other diacritics to draw attention to the marked difference in their respective articulations.

Cross-linguistically, the articulation of a tapped rhotic as a segment changes to an approximant as a result of pronunciation shifts (Crystal 1995: 245). Plausibly, many Palawa approximants in word-initial position had tapped rhotics as their immediate progenitors and were a product of lenition; but this cannot always be predicated. Approximants when present in medial position were sometimes the product of lenition, and at other times are likely to have been the product of other factors such as labiovelarization and dissimilation. Hypothetically, rhotics could have been epenthetically inserted within vowel clusters as a glide, but there is no evidence of this. Palawa rhotics in initial position are nearly always explicable as the product of eclipsis, and in following word elements eclipsis accompanied by epenthetic alliteration (§ 7.6.8).

Approximants were rarely, if ever, accented segments. As a result they frequently lenited to semi-vowels and vowels (§§ 7.6.2.1.2 and 7.6.2.1.3). The more typical changes were to [**w**] (transcribed as both <**w**> and <**u**>), [**v**], [**j**] and to vowels which were often transcribed as the second vowel in a vowel cluster. Pronunciation shifts from [**r**] to [**w**] in word-initial position would appear to have been very infrequent. Plausibly in any such cases the phonological progression was [**dr**] > [**tr**] > [**r**] > [**w**]. Ostensibly similar progressions can be viewed in the Palawa words for *elbow* (*Wordlist*: 84-85). But the numerous labiovelarised words for *arm* (pp.83-84) suggest that evidence of labiovelarization may have been lost in the words for *elbow,* and that the change may have been in the opposite direction. See also the words for *ear* discussed in § 7.6.2.3 where the progression was [**k**] > [**k**^{w}] > [**w**] > [**r**].

Crowley and Dixon (§ 7.6.4.3) do not appear to have been conscious of the presence in Palawa of post-alveolar affricates. In their defence it can be stated that in *Macquarie* there are very few words indeed which have either <**dr**> or <**tr**> in word-initial position, and that words so headed plausibly present as words headed by a consonant cluster. Similar comments apply to the Victorian place names listed by Clark and Heydon (2002) which have <**dr**> and <**tr**> in either word-initial position, or in initial position in following word elements. A salient point is that dissimilation and/or lenition of the post-alveolar affricates led in many words to a rhotic as the replacement. Examples will be provided in § 7.6.2.1.1, but for the purposes of this overview, the relevant phonological progressions were as set forth in Table 7.6.2.1 below.

Cross-linguistically the liquids are recognised as unstable segments (Hock 1991: 108; 128-130), and led to switches between rhotics and laterals. Their instability in the Palawa languages is amply evidenced (§§ 7.6.2.2 and 7.6.8). Their stability was aided in initial position by the stressing of word elements, and the accenting of segments, but they were much less stable when

stressing or accenting was not present (§ 7.9). Comparative analysis suggests the presence in the progenitors of Palawa words of consonant clusters in the form **/rŋ/** as the final segments in word elements (§ 7.6.8.1). As a result of eclipsis followed by epenthetic alliteration, alternations between rhotics and laterals are a common feature of the Palawa languages when positioned as the initial segments in following word elements. There were also switches between laterals and apico-alveolar stops (§§ 7.6.2.1.2 and 7.6.2.2). Each of the matters referred to explains the phonological progressions shown in the following Table. The phonological progressions were historical events initiated by the dissimilation of post-alveolar affricates, followed by the eclipsis of **[t/d]** in the resultant consonant clusters. Any further changes were the product of natural pronunciation shifts.

Table 7.6.2.1

[d^{r}] > [r] < > [l]
[d^{r}] > [r] < > [w]
[d^{r}] > [r] < > [j]
[d^{r}] > [d] > [l] < > [r]
[d^{r}] > [d] > [t]
[d^{r}] > [t^{r}] > [r] < > [l]
[d^{r}] > [t^{r}] > [t]

The discussion of rhotics which follows involves an assumption that with the exception of the Robinson and Sterling transcriptions of schwa in the form **<er>** (§ 7.8.3), **<r>** was not used as part of a digraph, or otherwise as a diacritic. At first sight the incorporation of **<r>** in transcriptions of word elements in the form CV**r**(C) could evidence the use of a silent *r* to indicate a preceding long vowel just as it does today in the spelling of many English vowels. Crowley and Dixon so assumed (1981: 413 – see their discussion of E: gar <ware.ter> as a word for *limpet*). But the assumption is supported by neither evidence nor argument on their part: nor is it tenable. It does not explain the presence of an **<e>** in the word, nor the dot. (Crowley and Dixon make no reference to the use of dots.) The assumption implies that on the same and following page of *Wordlist* (pp. 269-270), the Robinsons in their words for *mussel* sublisted under <mire>, <pare.role.rer>, <par.nel.er> and <ware.rin.yer>, were also transcribing a silent **<r>**. But the same words were transcribed by others. Those others included French speakers, Milligan (a Glaswegian), Brown (another Scotsman), and Scott (a third Scotsman), all persons very familiar with the articulation of both retroflexes and, rhotics in final position. The

alternative and quite implausible possibility, is that the Robinsons frequently used <**r**> carelessly and misleadingly to identify both [**a:**] and [**r**^{r}].

However, there are a number of further salient facts. They are, firstly, that the recorders referred to are unlikely to have transcribed a silent <**r**> to identify long vowels in Palawa words, because of the inevitable confusion it would have caused. The Robinsons themselves were living in a British colony in which (south eastern) English, (Midlands) English, (Scottish) English, and (Irish) English were all spoken, and they would have been just as conscious of the potential for confusion. Secondly, there is no evidence that the Robinsons were guilty of any similar gaffes in their transcriptions of other segments. Thirdly, there are no Robinson transcriptions of this nature that establish the incorporation of a silent <**r**>. The point here is that lenition leading in many cases to eclipsis led to the loss of both [**r**^{r}] and [**ř**] in many words, and as between themselves the major recorders were remarkably consistent in their transcriptions of <**r**> in apparent cognates. Fourthly the transcriptions of ostensibly geminate consonants in the forms <**r.r**> and <**w.w**> (§§ 7.6.2.1.2, 7.6.6 and 7.7.1) are left unexplained by the Crowley-Dixon assumption. Fifthly, there is a particularly close correspondence in the Robinson transcriptions with those of Sterling. Included in the few transcriptions which do differ, are the Sterling transcriptions which incorporate <**r**> in word-final position to indicate 'colour'. Even so, there are a number of like Robinson transcriptions (§ 7.6.2.1.3). Very importantly Milligan and the other Scottish recorders almost invariably omitted an <**r**> in word-final position when transcribing apparent cognates of the Sterling and Robinson words. Sixthly the bolded segments in the asterisked Kaurna words in Table 6.4.10 (p.110) make it abundantly clear that Charles Robinson transcribed <**r**> to denote a rhotic. Even in the few words which do not in this respect accord with the Teichelmann and Schürmann transcriptions, instability of the rhotic and eclipsis provide completely plausible explanations. Finally the transcription by the Robinsons of <**a**> in many words instead of <**er**> as a form of schwa is quite telling (§ 7.8.3). Similar comments apply to the Walker and Backhouse transcriptions of words with V**r** in word-final position. The only reasonable conclusion is that the transcription of an <**r**> by the Robinsons, and all other major recorders denoted the identification of a rhotic, the only exception being the transcription of <**r**> in a digraph which transcribed schwa (§§ 7.6.2.1.3 & 7.8.3).

§ 7.6.2.1.1 Rhotics in Word-initial Position

Whenever comparative data in the form of comparable words is available, it enables one of two alternative explanations to be proffered with respect to rhotics in word-initial position. Sometimes, but only very rarely, [**w**] has shifted to [**ř**]. The great majority of shifts followed the dissimilation and/or lenition of a post-alveolar affricate [**dʳ**]. This strongly contrasts with the phonological history of labio-velar semi-vowels and rhotics in other positions.

In English whether a rhotic is articulated as a tapped rhotic, or as an approximant, it is not contrastive (Crystal 1995: 126). Accordingly in English **<r>** is employed to transcribe both sounds. A further consequence is that the articulation of rhotics in English is at least partly conditioned by their phonological environment. Somewhat similar comments apply to the articulation of rhotics in French. Importantly for present purposes, the European recorders did not distinguish in their transcriptions between the rhotics unless the segment identified was a different segment such as [**w**] (see later). As a guide to British perceptions of the Palawa sounds, it is worth keeping in mind that various sounds transcribed as rhotics in English speech were articulated by English speakers in the early nineteenth century. To do so alerts one to the possibility that the transcription of rhotics in Palawa words may have masked a similar range of sounds. To quote from the *Cambridge Encyclopaedia of the English Language* (Crystal 1995: 245)

> '/r/. Articulation: Post-alveolar approximant (or frictionless continuant): .... ; lip position influenced by following vowel (spread in reach, rounded in room); becomes a fricative when preceded by /d/...; becomes a tap between vowels and after some consonants (as in very,..., three); voiced, with devoicing after /p/, /t/, /k/ (as in pry); ...'
> Some regional variants: More variants than any other consonant; major division into accents which use /r/ after vowels (rhotic accents) and those which do not (non-rhotic accents); tongue tip curled back (retroflexed) ...; replacement by /w/ (red / wed); ...

Crowley and Dixon (1981: 410) state:

> There is some evidence that Tasmanian, like almost all languages from the Australian mainland contrasted a flap or trill /r/ with a frictionless continuant /□ /'
> Where there is an alternation between *r* and *l*, or between *r* and *w*, we infer a continuant /□ /.

They cite what ostensibly are some Palawa cognates as examples in which **<r>**, **<l>** and **<w>** were transcribed as the initial segments. No examples that demonstrate a contrast are provided. They also refer to Melville's comments (*Wordlist*: 28), viz:

> [The Tasmanian Aborigines] have been noticed to sound the letter R, with a rough deep emphasis, particularly when excited by anger or otherwise, and that upon these occasions also, they use the word *werr werr* very frequently.

and continue:

We infer that the alternation of *dr* with *r* in the sources indicates a flapped or trilled rhotic.

Examples of ostensibly cognate words in which <**r**> and <**dr**> were transcribed as initial segments followed. But nowhere do they address the question as to how transcriptions of <**r**> are to be interpreted when comparable words incorporating <**l**> and <**dr**> are not available for comparison. Importantly they do not appear to have addressed the manifest possibility that the transcription of <**r**> in <**r**oogara>, <**r**ee.wool.lar> and <**r**anga> as their examples, denoted approximants. It is also noted that on page 409 their phonetic representation of the bolded segments in <**dr**oe.thin.ner> as **/dr/** denotes a consonant cluster, an interpretation which ostensibly is inconsistent with their interpretation of <**dr**> in their other examples. It also needs to be reconciled with the transcription of <tr> in -: sn <**tr**ōgŭrlīgŭrdĭck> = *hang as a culprit* (*Wordlist*: 247).

With great respect, I disagree with most of the inferences drawn by Crowley and Dixon. Some of them are in fact untenable. Unless <**dr**> is interpreted as a rhotic, I have been unable to identify any direct evidence which indicates that in Palawa tapped rhotics were contrasted with approximants. But as discussed below and later (§ 7.6.4.3), it is clear that most, if not all, transcriptions of <**dr**> denoted a post-alveolar affricate. Crowley and Dixon do not clarify whether their surmises extend beyond the transcription of rhotics in word-initial position. Assuming that their comments were intended to apply to rhotics in medial and final positions, then they have failed to address possible differences in the articulation of rhotics in initial position in following word elements; as final segments in word elements; as geminate segments; and as single segments between vowels in disyllabic word elements. The surmises also logically imply that most of the European recorders consciously and uniformly amongst themselves created <**dr**> as a new digraph which was used to distinguish certain tapped rhotics, but not others, and having identified a tapped rhotic negligently failed to distinguish in the great majority of their transcriptions between other tapped rhotics and approximants. As noted above, the very common alternations in transcriptions between <**dr**> and <**tr**> would in that case also need explanation. Compare, for example, NE: gar <**dr**o.duke> = *dog* with E: gar <**tr**y.hag.ge.ner> = *dog* (*Wordlist*: 294-295), SE: gar <**dr**ayner> = *forest kangaroo* with E: gar <**tr**yner> = *large kangaroo* (p.298), and E: gar <**dr**ay.han.ner> = *female 'tar.rer'* with NE: gar <**tr**un.han.ner> = *female 'tar.rer'*.

The suggestion that <**r**> and <**w**> were alternations, and that in those alternations the articulated consonants were rhotics and to be interpreted as continuants is untenable. It ignores

the context in which Melville placed his comments with respect to **<werr>** as a sound, and the inference that **<w>** was not a transcription of a continuant, but of a heavily accented bilabial semi-vowel. Even more clearly **<rr>** was a digraph which transcribed a trilled rhotic. There are five Robinson words for *devil* (*Wordlist*: 203) with **<wr>** in initial position. Whilst these are comparable with the utterance recorded by Melville, they stand alone in the lexicons. However, it is difficult to avoid the inference that they were onomatapoeic in nature, and as such heavily accented rhotics. Transcriptions of **<w>** as a single segment are common, and they appear in word elements in initial, medial, and final positions. Similar comments apply to transcriptions of **<r>**. If so intended by Crowley and Dixon, one simply cannot extrapolate from Melville's observation that transcriptions of **<r>** were approximants in all words and in all positions. Cross-linguistically one can refer to the transcriptions of **<wr>** in initial position in the lexicons of the Germanic family of languages as comparable with the Palawa words for *devil* (Onions 1966: 1014). The Crowley-Dixon propositions can be tested against apparent cognates and other comparable Palawa words, such as the words for *grass* sublisted under <troun.nin.er> (*Wordlist*: 347), and for *island* sublisted under <row.ne> (p.275), and place names such as ***Drobe.ber.ler mar.gen.ner*** ('the country at Pipers River') and ***Roob.bel.er.marng.en.er*** (Pipers River).

In other respects it is convenient to first discuss the relationship of the segments denoted by **<r>** in word-initial position, with **<dr>** in apparent cognates. As noted, Crowley and Dixon would appear to have assumed that both **<r>** and **<dr>** transcribed rhotics. But [**d**$^{\mathbf{r}}$] presents far more plausibly as a post-alveolar affricate (§ 7.6.4.3). On this hypothesis **<r>** in word-initial position usually evidences devoicing of the affricate, followed by its dissimilation, and ultimately by eclipsis of the alveolar stop. As well as rhotics, the devoicing of [**d**$^{\mathbf{r}}$] produced an unvoiced **<tr>**, and after its dissimilation an alveolar stop. Other pronunciation shifts led to the articulation of sounds identified by the European recorders as lamino-dental and lamino-palatal stops, and palato-alveolar affricates. Table 7.6.2.1.1(a) provides examples, but there is a wealth of other evidence. The words for *hand* listed under <ree> in *Wordlist* (pp.85-87) list numerous apparent cognates which illustrate the phonological progression from [**d**$^{\mathbf{r}}$] to [**r**]. One of the words transcribed is **<dr**ee>. The progenitor was a longer word, and plausibly an apparent cognate of W: gar **<dr**ay.bur.ic> = *hand*. The words sublisted under **<tr**een.ner> support the surmise. Ignoring <'ngotta> and <oottamutta> which have no place in the group, all are Eastern speech words. Not only do they include **<dr**egena>, but they include words with **<tr>** and **<r>** in word-initial position. Perhaps significantly there is no evidence of the lenition of [**d**$^{\mathbf{r}}$] to [**d**].

In other words, devoicing of the affricate was probably the initial step, and a prerequisite to the replacement of [**d**^{r}] by alveolar stops and other segments. On this basis <**t**ogue> is an apparent cognate of <**r**eegebena> and <**rag**'ŭrnĕr>, its first segment evidencing the lenition of [**t**^{r}] to [**t**]. There are a very large number of other words which lead to the same conclusion including the words for *grass* and *island* referred to above. W: cr <**dr**ar.bur.ick> as a word for finger (*Wordlist*: 88) is closely comparable with the words sub-listed under <ri-ena> which include <**r**eena>, <**tr**ee> and as a plural <**r**eeleah>. But for their glossing, they would in a number of cases be classed as apparent cognates. The words for *thumb* (p.89) are fewer, but provide a comparable set. Further sets can be viewed in *Wordlist* listed under *House / Hut* (p.257); *kangaroo / wallaby* (p.297-302); *berry* (p.340-341); *fern* (p.343); *fungus* (344); and *Spear* (402). The selection proffered is by no means exhaustive. In Table 7.6.2.1(a), bolding indicates the relevant segments, and underlining indicates the second arm in what are believed to be doubly reduplicated words.

Table 7.6.2.1(a)

E: gar	**dr**ay.han.ner	*female tarrer*	cf.	E: gar	**tr**un.han.ner	*female tarrer*
				N: gar	**t**ar.rul.lare	*boomer*
				E: jj	**r**agana	*female doe*
N: gar	**dr**y.rul.lare	*little joey kangaroo*	cf.	E: mj	tumnanna	*joey*
				SE: mj	**r**arryna	*joey*
W/NW: mj **dy**ekka namenera *growl*			cf.	SE: mj	kee**tr**elbya	*sullen*
				NE: cr	ke.**t**er.re.ler.per.noong.er	*sulky*
				NE: cr	**t**arl.**tr**in.er	*cranky*
				E: jj	**r**atacrareny	*sulky*
				NE: cr	yoke.er.nur.rer	*sulky*

Palawa place names (*Place Names*) provide further persuasive sets of examples. Confining the examples to names for islands, ***Dray.wun.ne*** and ***Drore.rore.rer*** are names for Maatsuyker Island and Perkins Island; ***Troe.bain.te, Trou.wer.ner, Trow.wer.line.er*** and ***Trow.wer.nar*** are respectively names for King Georges Rocks, Tasmania, Walker Island and Cape Barren Island; ***Tare.ree.ner, Tar.rore.rer, Tar.way, Terelbesse, Tier.re Mair.re.mer Lune.ne*** and ***Tye.er.rit.ter,*** are respectively names for Preservation Island, Petrel Island, Robbins Island, Swan Island, Maria Island and Tailleefer Rocks; and ***Reeneka, Rokeleeper, Row.wer.line, Row.wer.ren.ner,*** and ***Run.ner.boor.rike,*** are respectively names for Hunters Island, Maria Island, Stack Island, Schouten Island and the Shell Islets. There are also a number of comparable names for islands with <**l**> in initial position. Inasmuch as they may feasibly evidence a semantic change rather than a pronunciation shift, they have not been cited.

Henry Melville's comments with respect to the articulation of *werr werr* do not stand alone. They are supported by the Charles Robinson transcriptions of <**hue**.le> and <**warl**.i.pare> as (south) Eastern speech war whoops (*Wordlist*: 215). They provide further evidence that in Palawa accented tapped rhotics were used onomatapoeically to provide emphasIsland The words for *devil* headed by <**wr**> in this respect match the numerous words for *devil* headed by both <**dr**> and <**r**>. See Table 7.6.2.1(b). As well, the transcription of -: gar <**rhoydee**>'= *amulet*, can be compared with its six Robinson apparent cognates in which the initial segment is <**r**>, and with similarly transcribed words in the table. Bolding in Table 7.6.2.1(b) indicates the relevant segments, and underlining the second arm of doubly reduplicated words.

Table 7.6.2.1(b)

-: gar	**wrag** geo**wrapper**	*devil*	cf.	E: cr	**drie**werrowwenner	*devil*
SE: gar	**wrae**geo**wrappe**	*devil*		SE: mj	**ria** warrawah noilé	*demon*
SE: gar	**wrong**.**wing**.**en**.**er**	*curtsey*	cf.	NE: cr	**tre**.an.er.me.pare	*shake hands*
				N: cr	**ta**.ne.re.pare	*shake hands*
				SE: gar	**with**.er.en.in.nu.he	*shake hands*
E: mj	**rhine**owa mungonagunea poggana karné				*conversation*	
		cf.	E: gar		**dree**.cam.cap.per.kām.nĕr	*speak/ talk*
				W: mj	**rinnea** guannettya	*dispute*
E: mj	**rhinyetto** (5 apparent cognates)		cf.	E: cr	**dring**.e	*chase*
		chase				
W/NW: mj	**rhom**dunna	*star*		SE: mj	**rom**tenah	*star*
?: gar	**rhoy**.dee	*amulet*		SE: gar	**roy**deener (+ 5 apparent cognates)	*amulet*

Whilst not so suggested by Crowley and Dixon, it seems likely that in many contexts articulations of [**d**ʳ] in initial position in word elements contrasted with articulations not only of both [**r**ʳ] and [**ř**], but also with articulations of [**t**] and [**d**], and their palatalised forms (§ 7.6.3.4). In a very large number of place names for large and/or open bays, the initial segment was transcribed as <**dr**>. ***Drayter*** as a name for Great Oyster Bay provides an example. On the other hand <**tr**> appears as the initial segment in many names for beaches and large tidal estuaries, both lesser features than open bays. Thus ***True**.**youth**.**big**.**gen**.**ner*** was a name for *Sandspit Beach* (*Place Names*: 62). On the other hand names for tidal estuaries and semi-enclosed bays often have transcriptions of <**r**> as their initial segment. ***Rang**.**goe**.**radde*** as a name for North–West Bay, and *Raminea* as a name for Port Esperance are examples.

The foregoing discussion leaves open whether transcriptions of <**r**> in word-initial position denote tapped rhotics, or approximants. It is suggested that the articulation of the rhotic in this position varied, but that in the great preponderance of words and place names it was probably an approximant. As well as the evidence which supports the progressive devoicing of post-alveolar affricates, the initial segment in Palawa words was usually, but not invariably, unvoiced (Schmidt 1952: 118-121; Crowley and Dixon 1981: 408). See also the discussion of voicing in § 7.10. Assuming that the suggestion is correct, then the preservation of a post-alveolar affricate in many words and place names, and the articulation of tapped rhotics in word-initial position in other words. could have provided onomatopoeic emphasis in the articulation of words. Thus ***Dray.ter*** as a name for Great Oyster Bay (*Place Names*: 8) can be compared with ***Too.ge.low*** as a name for Port Davey (p.80), and ***Rang.goe.rad.de*** and ***Raminea*** cited above, both much smaller than Port Davey. Likewise as a word for an erect penis SE: gar <**dr**ore.rer> (*Wordlist*: 130) can be compared with the words sublisted under<**d**ee.ver.ry>, <dee.ve.lun.ne.mer.rah>, <**t**ibera> and <**r**ee.luc.ker.neener> as words for the female genital organs (pp.127-128).

§ 7.6.2.1.2 Rhotics as medial segments

Many Palawa word elements fit a template in the form CV**r**(C). The possibility that the transcription of a rhotic in these word elements evidences the one time articulation of a retroflex is very plausible (§ 7.6.2.4). In any event, it can be readilly inferred that most rhotics in this position were either tapped rhotics and/or retroflexes. Approximants function as semi-vowels and glides (Hock 1991: 17), and accordingly the articulation of an approximant before a following consonant in the same word element is implausible. But if I am wrong in this, it is nevertheless suggested that the approximant would almost certainly have evidenced the lenition of a tapped rhotic, and/or the dissimilation of a retroflexed consonant. Table 7.6.2.1.2(a) provides some examples of the points made in this subsection. The bolded segments in the following word elements evidence the former presence in the preceding element of a retroflexed segment or consonant cluster in the form CV**rŋ**, and the masking of that fact by eclipsis on each side of the syllabic boundary plus epenthetic alliteration (§ 7.6.8).

Table 7.6.2.1.2(a)

NE: gar tal.lar.ner	*shoulder*	cf.	N: cr	tol.lun.ni	*shoulder*
W: cu wār'rănōok	*finger*	cf.	W: cu	wy.mar.nock	*finger*
W: gar parn.nic.er	*water*	cf.	W: gar	par.nick.er	*water*

Table 7.6.2.1.2(a) continues

Cf.

Bunganditj parrik / pingkum *water* Woiwurrung **baan**^{y} *water*

At first sight some words for *ear* (*Wordlist*: 1 12) could be interpreted as contradicting the surmises advanced. But the fact that NW: bm <**cowwan**rigga> and its like are disyllabic is explicable as a product of dissimilation (anaptyxis). In other words the ostensibly geminate semi-vowels evidence eclipsis of the first segment in a following word element, followed by epenthetic alliteration which involved either [**r**], or [**w**] as the final segment in the preceding element as its replacement. In this respect <cowwanrigga> can be compared with <gŏun.rēek> and <ku.rib.ber.ner>; W: cr <cow.wer> = *teeth* with SE: mj <coorina> = *fang* (p.109); E: gar <pow.wot.ter.rer> = *down in the bottom* (p.173) with E: gar <par.net.tar>; W: gar <now.win> = *inspire* (breathe) (p.176) with NE: cr <mare.pree> = *breathe*; W: gar <pow.wen.ne> = *devil / evil spirit* (p.203) with N: gar <par.lu.mi.rer> = *devil.* There are a number of other examples which illustrate the phonological progressions involved.

When a rhotic was transcribed as the final segment in a word element, its articulation as an approximant is rarely plausible. Its transcription in this position was in three forms, viz <**r**>, <**re**>, and <**r'**>. The transcriptions in the forms <**re**> and <**r'**> evidence accenting (§§ 7.3.1 and 7.3.2), and thus a tapped rhotic. As noted at the end of § 7.6.2.1, approximants function as semi-vowels and glides. Accordingly, to interpret the transcription of <**r**> in word-final position as an approximant is also implausible. Furthermore, as noted in § 7.6.2.1, the transcription of ostensibly geminate consonants in the forms <**r.r**> and <**w.w**> establishes the fact that many rhotics in final position must originally have been tapped rhotics. It will be recalled that Milligan emphasised that the first of two consonants in a set of geminate consonants was the more heavily accented (§ 7.5.1). This supports the proposition that the first consonant in transcriptions of <**r.r**> was a tapped rhotic. Plausibly transcriptions of <**w.w**> could evidence the possible identification and misinterpretation of an approximant by a European recorder, a surmise not only supported by the examples provided in Part A of Table 7.6.2.1.2(b), but also by the fact that there are no equivalent French transcriptions. Similar comments apply to transcriptions of <**y**> in the same context. But contrary to this interpretation, is the evidence provided by the Kaurna words listed in Table 6.3.10 (p.110). As a general proposition both Charles Robinson, and Teichelmann and Schürmann, accord in their respective transcriptions of words which incorporate rhotics (see the asterisked words in the table), and of words which incorporate bilabial semi-vowels.

The ostensibly doubly reduplicated words listed in Part B of the table also support the surmise. In <reea – rarra>, it seems improbable that as an articulation an approximant would have preceded the articulation of geminate rhotics. In <ree - trierrena, the initial segment in the second limb preserves an unvoiced post-alveolar affricate. Similar comments apply to *Drore.rore.rer*. Arguably <veré> (cf. Melville's comment as quoted by Crowley and Dixon), and <kindrega> provide further evidence. *Drore.rore.rer* provides further strong evidence, in that the final segment in the first and second word elements was heavily accented (§ 7.3.1). It seems inconceivable that the bolded rhotics would have been articulated as approximants. *Drore.rore.rer* is not an isolated example of the phenomenon. The words for *neck* sublisted under <lee.pare.rer>, <lue.lare> and <lu.pare.re.ner> (*Wordlist*: 119) provide a particularly good exposition of the hypothesIsland Both <r> and <re> in word-final position in many of these words evidence epenthesis (§ 7.6.2.1.3), a phonological development which is inconsistent with the transcription of an approximant. For what it is worth, the hypothesis is consistent with the post-alveolar trill typically articulated at the end of stressed syllables in the mainland languages (§ 7.6.2). In the Table, bolding indicates the relevant segments, and the second arm in a doubly reduplicated word has been underlined.

Table 7.6.2.1.2(b)

Part A

W: cr	trar.wer.er.kike	*nose*	cf.	NW: gar	drow.wer.rid.de.yer	*nose*
E: cr	wer.ren.ner	*chinbone*	cf.	SE: gar	waw.wek	*chin*
SE: mj	coorina	*fang*	cf.	W: cr	cow.wer	*teeth*
NE: gar	too.rer	*moon*	cf.	NE: gar	too.wer.er	*moon*
				-: gar	tow.wer.rong	*moon*
E: gar	lū.pāre.rĕ.nĕr	*neck*	cf.	E: sc	loobeyera	*neck*

Part B

SE: mj	reea – rarra	*palm of hand*	E: mj	ree – trierrena	*fist*
SE: fr	kindrega	*beat*	SE: fr	veré	*donner un coup de pied*
	Drore.rore.rer	Perkins Island	*Ta.rore.rer*	Petrel Island	

Cross-linguistically, pronunciation shifts from rhotics to laterals and ostensibly further to voiced and unvoiced alveolar stops are commonplace. As already noted on several occasions, and plausibly for the reasons given by Hock (1991: 17), the liquids tend to be unstable.

Accordingly, the replacement of [**r**] by [**l**] as a final segment in Palawa word elements is plausible evidence of a common progenitor, and to be expected. Examples are provided in Table 7.6.2.1.2(c). The transcriptions of [**l**] can be ambiguous in thathypotheticallythey may instead evidence alternations of a rhotic identified by its recorder as a lateral. But pronunciation shifts to [**l**] certainly took place. Thus the replacement of [**r**] by alveolar stops as a phonological progression through [**l**] is well evidenced, albeit in statistical terms much less common. Their presence in geminate consonants excepted, alveolar stops rarely appear in final position in word elements, and when they do, there is usually an explanation. Thus in N: cr <nar.rul.pe**t.**lar> = *swan* the presence of [**t**] evidences eclipsis of the first segment in the fourth element, its replacement following epenthetic alliteration by [**r**], followed later by pronunciation shifts in the form of a phonological progression from [**r**] > [**l**] > [**d**] > [**t**]. Thereafter anticipatory assimilation replaced the original [**r**] in the preceding element. Ultimately there was semantic assimilation of the [**t**] in the fourth element to *lia a Nara qualifier which indicated 'large size' (§ 7.6.2.2).

Table 7.6.2.1.2(c) provides examples. Bolding indicates the segments which evidence the progression from [**r**] > [**l**] > [**t**]. Victorian words have been included in the absence of appropriate words in the Palawa lexicons. For the relevance of Victorian words and names for streams see § 7.6.8 and following, and in particular Table 7.6.8.2. Further examples in the form of ostensibly geminate consonants can be viewed in *Wordlist* in the groups of words for *BLACK* (p.164); *HASTEN* (p.248); *HOUSE* (p.258); *HUNT* (p.259); *ant* (p.264); *oyster* (p.272); *shell* (p.273); *JUMP* (p.277); *LARGE* (p.281); *LAUGH* (p.283) and *LICK* (p.285).

Table 7.6.2.1.2(c)

NE: gar	mair.re.wer	*one*	cf.	W: gar	mode.er.rick	*one*
SE: mj	marrawah	*one*		SE: gar	mō**tty**	*one*
N: gar	more.rul.lare	*one*				
W: cr	car.lar.rer.wang.er	*sit down*	cf.	NW: gar	kal.le.neen.te.yer	*sit down*
				W: gar	kar.lad.de.gin.er	*sit down*
E: jj	warthawina	*large river*	cf.	-: lh	waltomana	*river*
				SE: mj	wayatinah	*brook*
NE: gar	mor.ter.moon.ner	*river*		E: jj	montumana	*rivulet*
				W: jj	nabowla	*river*
Bunganditj	purri	*river*		SE: mj	lia-pootah	*little river*
Warrnambool	purring	*river / creek*				

Table 7.6.2.1.2(c)

War.ker.rune.no	Mersey River	cf.	*War.ter.rer.kar.dou.ler*	Great Forester River
War.wool.er.nun.ne	Mersey River		*Wattra Karoola*	Pipers River
War.roun.rim	Wanderer River		*Wee.tac.en.ner*	Nile River
Barbarton	Wimmera River		*Bullarook*	Bullarook Ck.
			Bundarra	Bundarra River

Comparative analysis reveals that in most, perhaps all word elements in the form CV there has been eclipsis of a rhotic (§ 7.6.8.1). Word elements with a template in the form CVC are more ambiguous. There is no evidence that once lost, a rhotic in a word element was ever replaced.

Transcriptions of what are ostensibly consonant clusters in initial position are not uncommon in Palawa. The reference is to **<kr/cr>**, **<kl/cl>**, **<gr>**, **<gl>**, **<tr>**, **<dr>**, **<pr>**, **
, **<tl>, **<pl>**, and **<bl>**. Comparative analysis of the transcriptions which incorporate **<tr>** and **<dr>** reveals that without any plausible exceptions the transcriptions denote post-alveolar affricates (§§ 7.6.3.4 and 7.6.4.3). Importantly, there is no evidence of the dissimilation of the post-alveolar affricates into syllables in the forms **dVr** and **tVr.** There is only one Palawa transcription of **<tl>** (NE: cr<per.**tl**o. ter.ner> = *frog* (*Wordlist*: 452)), best explained as an alternation of **[tr]**. There are no Palawa transcriptions in the form **<dl>**. The ultimate progenitors of the other clusters referred to were probably labiovelarised dorso-velar and bilabial stops, but final determination of that hypothesis will have to await etymological analyses which involve an exposition of the semantic changes that took place in proto Australian, as well as post 40,000 BCE. The evidence provided by comparative analysis is discussed in §§ 7.6.3.1, 7.6.3.2 and 7.6.8.2. Plausibly, as in English (Crystal 1995: 245), the rhotics in the clusters were probably tapped when they followed a voiced stop, and approximants after an unvoiced stop, but there is no unequivocal evidence to that effect.

As noted earlier, direct pronunciation shifts from **[r]** to **[d/t]** in word-initial position have not been unequivocally identified, and are inherently unlikely. As also already noted, shifts between **[r]** with **[l]** are well attested cross-linguistically (Hock 1991: 107-108), and in Palawa words there is ample evidence of shifts from **[r]** to **[l]** in medial positions. Some particularly illustrative words for *finger* were listed in Table 7.4.2(b). However, the inclusion of SE: rb **<rauba>** in a large group of words for *oyster* listed under subheading **<louba>** (*Wordlist*: 272), suggests that the articulation of laterals in initial position also shifted back to a rhotic. Alternation in the identification of the segment articulated is an equally plausible explanation in a number of words, and clarification will have to await an exposition of the genetic links

between the Pama-Nyungan and Palawa languages. In a number of words, rhotics, laterals and alveolar stops as geminate consonants straddle both sides of a syllabic boundary (see above for a list of references). The salient point is that the first rhotic in sets of geminate rhotics would almost necessarily have been a tapped rhotic, a matter confirmed by Milligan's observation that it was the first consonant in pairs of geminate consonants which was accented (1890: 13)

§ 7.6.2.1.3 Rhotics in Word-final Position

Transcriptions of <**er**> and <**ar**> appear in word-final position in a number of words recorded by Jorgenson, Sterling and the Robinsons. There is little doubt that <**er**> was a digraph which recorded a form of schwa very similar to the sounds denoted by transcriptions of <**er**> in word-final position in English (§§ 7.5.1.3, 7.5.3.1, 7.6.1.1 and 7.9).

<**ar**> as a suffix evidences an epenthetic rhotic or similar, triggered by the stressing of a final word element, and/or accenting of a vowel which earlier had been the final segment in the word. Some English linguists refer to the phenomenon as 'colour' (§§ 7.6.2.1 and 7.6.2.2). Examples are provided in Table 7.6.2.1.3. It is stressed that whilst the Robinson and Sterling transcriptions of <**er**> are consistent with its long established use as an English spelling convention which records schwa, there is no evidence that transcriptions of <**ar**> were employed by any of the European recorders to denote [**a:**]. Comparative analysis of the transcriptions of <**ar**> in word-final position, suggests that in a number of cases an epenthetic sound similar to a rhotic had been identified. It is further suggested that the Sterling transcriptions of <**ar**> in word-final position, indicates a sensitivity on his part to phonological nuances which were rarely appreciated by others. Nevertheless, the transcriptions of segments in word-final and other positions as a digraph in the form Vh by Milligan, Walker, Backhouse and others corroborate his perception of 'colouring' as a linguistic phenomenon, and thus support the proposition.

In Table 7.6.2.1.3 bolding indicates the relevant segments. In the first column of Part A the <**r**> is epenthetic. In the second column the <**y**> in <**bў̆dā̆y**> evidences lenition of the rhotic, and in the other words the bolded segments are digraphs. Part B compares schwa as transcribed by Sterling with schwa as transcribed by Milligan, the Robinsons and Jorgenson.

Table 7.6.2.1.3

Part A

SE: gar	bidar	*head*	cf.	SE: gar	bŭdāy	*head*
				SE: mj	poieté	*head*
NW: gar	cow.war	*teeth*	cf.	W: cr	cow.wer	*teeth*
				N: jj	cawna	*teeth*
W/N: gar	tar.de.bar	*bush devil*		SE: mj	tarrabah	*devil*
-: jj	lathakar	*male kangaroo*	cf.	W: cr	la.the.ker	*kangaroo*
				N: jj	lalliga	*male kangaroo*
				W: lh	lelagia	*kangaroo*
				SE: mj	lazzakah	*brush kangaroo*
-: sn	mēerōrār	*mushroom*	cf.	NE: gar	me.rore.er	*mushroom*

Part B

-: sn	lārngĕrnĕr	*to stare / track*	cf.	SE: mj	luggacanna	*footstep*
				NE: gar	long.e.er	*foot*
-: sn	tēumĭnĕr	*nails*	cf.	NE: cr	ter.me.ner	*finger nail*
				NE: gar	tur.ne	*finger nail*
-: sn	nārnĕrpēnnĕr	*knee*	cf.	E: jj	nannabenana	*knee*

§ 7.6.2.2 Laterals

The genesis of laterals as segments in Palawa words was discussed in connection with the transcription and phonological development of rhotics. To summarise, their genesis in word-initial position potentially has three possible sources. The great preponderance of the changes is believed to have originated as pervasive semantic changes. A further potential source was a pronunciation shift in the articulation of voiced alveolar stops to laterals. There is the further possibility that the instability of rhotics produced laterals in word-initial position, but this would appear to have been very rare in the Palawa languages. On the other hand, it is clear that the dissimilation of rhotics in final position in word elements led to their replacement by laterals, and that as a result of eclipsis followed by epenthetic alliteration the development flowed through into the articulation of laterals as the initial segment in following word elements. Table 7.6.2.1.2(b) provided examples.

It is unlikely that many of the European recorders would have been sensitive to variations in the articulation of the laterals in Palawa. The reference is to the different articulations of laterals in the mainland languages referred to by Dixon (1980 § 7.4.3), and the distinction between the articulation of 'clear' vowels and and the articulation of 'dark' vowels in, for example,

(Cockney) English and New Zealand diction (Crystal 1995: 245). They would probably have been more sensitive to the palatal [λ] articulated in Italian speech. However, whilst it is possible that some transcriptions of <**ly**>, <**lia**> and <**lea**> denoted [λ] as a segment and phoneme, the absence of any trancitptions in the form (V)**lg**V points away from [λ] as a segment.

With reference to the laterals, Crowley and Dixon state (1981: 410):

> The orthographic sequence *ly* occurs a few times in Milligan's and also in Robinson's vocabularies, but there is insufficient evidence to support a lamino-palatal, in addition to the well attested apico-alveolar lateral /l/.

Commenting, the sequence was also transcribed by Sterling, Jorgenson, Charles Robinson, Walker, Backhouse, and if transcriptions of <**lia**> and <**lea**> are recognised as synonymous, as well by the French recorders, Brown and Cunningham; in other words all the major recorders, and a number of the other recorders (*Wordlist*: *passim*). The transcriptions of <**ly**> are typically in the form of monosyllabic word elements, and the same comments apply to transcriptions of <**lia**> and <**lea**>. They thus present as transcriptions of a palatised lateral. The possibility that transcriptions of <**l**> might denote other forms of laterals as well as apico-alveolar laterals does not appear to have been considered by Crowley and Dixon. The palatised lateral had its genesis in a palatisated apico-alveolar lateral. This shift is so clear, and its subsequent crystalisation as a semantic change is also so clear, that the evidence for both will be presented as a means of illustrating one of the major progressions in the development of laterals from rhotics. The replacement of [$\mathbf{t^y/d^y}$] by [$\mathbf{l^y}$] as a semantic change took place on the Australian mainland, and gave rise to a qualifier which as a suffix in the Nara languages was used to indicate magnitude and pluralities. For descriptive purposes I have proposed a proto lexeme in the form *lia. A focal area of the semantic change may have been the Murray River basin. See the words listed in Part A of Table 7.6.2.2(a) below. Be that as it may, Part B of Table 7.3.1(a) provides examples. The lexeme as a suffix progressed to independent status as a word which was used to indicate an object or phenomenon of large size. See the examples placed in Part A of Table 7.6.2.2(a). Some words expressing 'badness' as a concept provide a strong case. See Part B of the Table. In the Nara languages dissimilation of [$\mathbf{l^y}$] led to conversion of the morpheme into **/lia/**, and when stressed **/lia/** acquired an epenthetic rhotic, leading to forms transcribed as <**lar**> and <**lare**>.

In the Table, bolding indicates the relevant lexeme(s), and underlining indicates the second arm of a doubly reduplicated word. It is suggested that <$\mathbf{t^y}$> and <**t**> in the words listed in Part A preserve <$\mathbf{t^y}$> as the progenitor of <$\mathbf{l^y}$>. The preservation of <$\mathbf{t^y}$> is clearer in the words listed in

the first column of Part B. The words in the second column evidence the semantic change, but a pronunciation shift cannot be completely ruled out.

Table 7.6.2.2(a)

Part A

Wembawemba	lambruk	*many / a vast number*	E: gar	**lue.**wer	*plenty*
Wembawemba	latvuk	*many / a lot*	N: gar	**lone.**tag.ger.rer.**tar**	*plenty*
Kaurna	yerrabula**lukko**	*four*	N: gar	**lu.**war	*four*
Warrnambool	**l**inkil	*big*	?: jj	**lack**rana	*great*
			E: cr	**arng.**ty.e.lip.pen.ner	*big / large*
			N cr	**la.ke.**not.ti.**lare**	*big one*
			N cr	**la.ke.**ca.bone	*big large / big one*
			NW: gar	kop.wa.**lan.ner**	*big / great*

PartB

NE: gar	kar.**tee**	*no good*	cf.	SE: gar	noi**le**	*bad no good*
NE: gar	kar.**tay**	*no good*		SE: gar	**ōilŷ**	*bad*
NE: gar	lee.peen.ne kar.**te**	*no like him*		SE: mj	noai**lee** nuggabah	*ugly*
N/NE: gar	car.**te.yer**	*bad*		SE: gar	**lāgĕnŏōilŷ**	*deception*
N/NE: gar	pudeyercar**teyer**	*no good*		SE: mj	liné poine noi**lé**	*filth*
-: lh	ka**tea**	*bad*				
NE: cr	car.**tit.te.**ul.**lar**	*dirty fellow*		E: gar	noi.yer.**lee**	*no good*
NW: gar	tue.de.by.**kate.er** pen.nin	*deception*		SE: jj	car**ly**	*bad*
SE: jj	car**ty**	*bad*				

Most transcriptions of laterals are in the singular. When doubled, typically either the transcription of dots between each <**l**> establishes the presence of a syllabic boundary and perhaps geminate laterals, or else when dots were not used, then comparable words establish that the transcription of <**ll**> straddled a syllabic boundary.

But there are some Robinson transcriptions which are not explicable on this basIsland They have been listed in Table 7.6.2.2(b). In the spelling of English words, <**ll**> can indicate a preceding short vowel. Whilst that is a possible explanation there are a number of matters which militate against such a conclusion. A very large number of word elements were transcribed by the Robinsons in the forms **Cal**, **Cel**, **Cil**, **Col** and **Cul**. It seems unlikely that in words such as NE: gar <pel.te.wot.ten.ner> = *finger* (*Wordlist*: 88), the vowel transcribed was a long vowel. Attention is also drawn to <wall.li>, <ill.lare> and other like words in which the first segment in sets of ostensibly geminate consonants has been transcribed in the duplicated form. The dot followed by the transcription of a single lateral as the initial segment in the following word element suggests heavier than usual accenting (§ 7.6.6). Along the same lines,

<ck> would appear to have been used in final position to indicate accenting (§ 7.6.3.1), and there is little doubt that Gaimard used **<nn>** in the same position to indicate heavy accenting (§ 7.6.6). Most of the words are from Northern speech. The same surmise is supported by words such as <dull.**dri**.la> and <war.**pull.dra**> in which accenting of the lateral is consistent with anticipatory assimilation triggered by the presence of an accented post-alveolar affricate (§ 7.9). It is therefore suggested that the most likely explanation is that transcriptions of **<ll>** denote the heavy accenting of a lateral as the final segment in a word element. In the table, bolding indicates the relevant segments

Table 7.6.2.2(b)

N: gar	nar.rer.**pull**	*cheek*	.N: cr	wall.li	*gums* (teeth)
N: gar	ill.lare	*crow*	N: cr	pill.dra	*parrot*
N: cr	dull.dri.la	*lake*	N: cr	mull.le.ne.re.pare	*large*
N: cr	ty.er.may.ill.drow.wer	*run away*	N: cr	war.pull.dra	*sit down*
N: cr	hull.dri.lare	*snow*	N: cr	hull.lare	*waddy*
N: gar	tull.ler.nar.ree	*basket*	NE: gar	ill.lib.en.er	*tea tree for boats*
NE: cr	will.to	*hawk*	NE: cr	pull.you.ner	*black*
NE: cr	cull.lar	*fire*	NE: cr	trou.well.lare	*insect in rotten wood*
NE: gar	ball.wot.ten.ner	*red ochre*	NE: cr	pull.le	*star*
NW: gar	bill.le	*laugh*	-: gar	pell	*river blackfish*

§ 7.6.2.3 Transcriptions of <roogara> and <lugarana>

Crowley and Dixon's discussion of rhotics and laterals illustrates a number of important points already made from time to time with respect to Palawa phonology and the orthographies employed by the European recorders of the palawa lexicons. My own discussion of rhotics and laterals has embarked upon matters which I suspect will be unfamiliar to many persons who are reasonably conversant with historical analysis as an aspect of linguistic studies. It seems to me that it will be useful to use the Crowley and Dixon discussion to illstrate their unfamiliarity with the Palawa lexicons, and more importantly to emphasise the immense importance of the caveats I have raised and other points made.

The pronunciation of segments in English and French is always suggestive when the same segments are ostensibly transcribed in Palawa words, as is the pronunciation of segments in the living Pama-Nyungan languages. But there can be no warrant, nor any licence, for the making of assumptions on such bases until all potential alternatives have been adequately investigated. Differences in the spelling conventions used by French speakers from those used by English speakers must at all times be kept in mind. Similar comments apply to differences in the

articulation of segments, not only as between French and English speakers, but in the regional dialects of the British Isles. By extension the comment obviously applies to both (Australian) and (New Zealand) English articulations. It seems clear Crowley and Dixon have not adequately addressed the resulting problems.

In discussing rhotics and laterals as segments, Crowley and Dixon compared E: sc <roogara> = *ear*, with -: ar <lugarana> = *ear* (*Wordlist*: 113), and surmised that they were cognates which differed principally in the articulation of their respective word-initial segments. They resolved the difference to their own satisfaction by interpreting the initial segments as alternations (1980: 410). The first point to note is that the vocabularies recorded by Scott, and the author of the 'Arthur' vocabulary, were small. This creates an initial uncertainty as to the articulation of the transcribed consonants and vowels inasmuch as the spelling conventions used by these recorders were not recorded, and the comparable data are few in number. The initial questions are why should one infer that the transcriptions of <**r**> and <**l**> were alternations of a rhotic, and if so, why should one further infer that the rhotic was an approximant. No arguments or evidence for the inferences has been provided. Rhotics and laterals are contrastive in English, and as sounds familiar to the recorders of <roogara> and <lugarana>. It is much more probable that the sounds heard were a rhotic and a lateral respectively. Brown identified a rhotic in <roigee>, and the Robinsons and Jorgenson a lateral in the words sublisted under <lunc.nin.ne> and <lur.ran.ner>. In the words sublisted under <lur.ran.ner> a rhotic in medial position was distinguished from the lateral identified in word-initial position. But articulation probabilities to one side, comparative anlaysis of all the recorded words for *ear* is revealing.

With the exception of <lugarana> the words in the <lur.ran.ner> group all present as words from North Eastern speech. This is not to deny the probability that <lugarana> is an apparent cognate. But it does not follow that the transcriptions of <**u**> and <**oo**> denote [**u**] and [**u:**] respectively. The Robinson and Scott transcriptions of <**oo**> are discussed later (§§ 7.8.1.1, 7.8.2 and 7.9). The probability, virtually a certainty, is that the Robinson transcriptions of <**oo**> record a vowel cluster, and not /**u:**/. Unfortunately, it has proved impossible to conclusively determine whether Scott's transcriptions of <**oo**> record /**u:**/, or a vowel cluster, but on balance his transcriptions also record a vowel cluster. The interpretation of <roogara> as a cognate of <lur.ran.ner> and <lugarana> must be downgraded if in fact Scott's transcriptions, like those of almost all other recorders, record vowel clusters.

A perusal of the words listed for *ear* sublisted under <vaigui> indicates that the Crowley-Dixon interpretation of <lugarana> and <roogara> as cognates was teleologically oriented. Presumably they also assumed that each of the other words in the <lur.ran.ner> group, including <lugarana> are cognates, an inference which is not disputed. But notwithstanding the instability of the liquids (Hock 1991: 107), they tend to remain stable in word-initial position. On the other hand, a shift from **<w>** to **<r>** is feasible, if also unlikely in word-initial position. What they would appear to have overlooked is the even closer resemblance that <roogara> and <roigee> have with the words sublisted under <vaigui>. These words evidence a progenitor with **<k/g>** in word-initial position, followed by labiovelarization. See the words listed in Part A of Table 7.6.2.3. Labiovelarization was followed by dissimilation of **[k^{w} /g^{w}]** as the segment, and subsequently in many words after dissimilation, eclipsis of the resulting dorso-velar stop. Compare not only the Palawa words for *ear* with **<v / w / ou>** in word-initial position, but as well the words listed in Part B of the Table. The phenomena are familiar cross-linguistically (Hock 1991: 73). Compare the similar loss of **[k/g]** in English words such as ***ward***, with its preservation in French *garder* and the loss in ***guard*** of **[w]** before its adoption by English speakers as a French loan word. Along the same lines, compare English ***war*** with French ***guerre***. The most economical explanation for the presence of **[r]** as the initial segment in **<r**oogara> and **<r**oigee>, is that the words are apparent cognates of the words listed under **<v**aigui> in which a rhotic has replaced the labial semi-vowel as the result of a pronunciation shift. Some other examples are provided in Part C of the Table, and further examples again are provided by the words for *beard* (*Wordlist*: 106); the words for *ear* (p.112); and for *crab* (p.261). The list is not exhaustive. As a phenomenon this shift is also well known cross-linguistically. Compare early nineteenth century English /wɛd/ = *red*, with its more universal pronunciation as /ɾɛd/ (Crystal 1995: 245), and the problems that some Sino-Tibetan and Japanese speakers have in distinguishing the liquids.

As a final and more minor point, the interpretation of <lugarana> and <roogara> as cognates involves a presumed loss of **<n**a> as a suffix in both <roogara> and <roigee>. There was no such loss if <roogara> and <roigee> are interpreted as cognates of <vaigui>.

Labiovelarization as a linguistic phenomenon is discussed in § 7.6.7.2, and examples which illustrate the dissimilation of labiovelarised dorso-velar stops followed by eclipsis of **[k/g]** are provided in that subsection. Table 7.6.2.3 provides some examples of words with phonological progessions from **[p^{w}]** and **[k^{w}] > [w] > [r]** as segments in word-initial position. In the table, bolding indicates the relevant lexeme in a compound word

Table 7.6.2.3

NW: jj	**quoiba**	*wombat*	cf.	N: cr	**rubi**lare	*badger*
				N: gar	**roe.**boy	*badger*
				W: gar	**koy**ber	*badger*
E: mj	**ko**koleen**y konqua**	*demur / grumble*	cf.	E: JJ	**ratacrareny**	*sulky*
NE: gar	**pe**waypeller	*look around*	cf.	E: cr	**wa**leerpare	*look out*
				E: mj	**reliquamma**	*look / gaze*
SE: fr	**que**ndera	*je vois*	cf.	SE: fr	**ren**dera	*je vois*
W/NW: mj	**kou**rah	*water pitcher*	cf.	SE: fr	**re**gaa	*sac qui*
contient						
						leur eau
NW: gar	**w**arth.hick.ar	*lay hold*	cf.	NE: gar	**re.too.rel.me.be.tar**	*lay hold*

§ 7.6.2.4 Retroflexes

Retroflex consonants are not limited to [**r**] as segments (Hock 1991: 77). However, in English retroflex articulations are so limited. Neither English nor French recorders would have been sensitive of any other forms of retroflex articulations, and if they had identified other forms had no spelling conventions to distinguish them in transcriptions. It is thus possible that NW: jj <**st**eka> = *stone,* and W: cu <**j**al.lop> = *stone* (*Wordlist*: 410) mask retroflex articulations. The same comment applies to Milligan's transcription of *Terelbesse* (Swan Island referred to in *Place Names*: 76), and words such as SE: <la**zz**'leah> = *pelican* (*Wordlist*: 155). Compare NW: gar <la**rth.**bar> = *pelican.* It seems unlikely that these possibilities can be usefully pursued.

In (south eastern) English and (Australian) English, retroflex [**r**] has either been lost, or else its articulation has become muted and indistinct. The eighteenth-century speakers of (Irish) and (Scottish) English, of many regional English dialects, of (American) English, and French speakers were all familiar with the retroflex as a sound. It can therefore be assumed that to the extent retroflexes involving articulations of [**r**] were present in Palawa, they would have been detected, and transcribed by <**r**>. The numerous trabscriptions in the form CV**r**C attest their detection. Crowley and Dixon state that 'There is no evidence in the Tasmanian materials for any retroflex sounds. Let alone retroflex phonemes' (1981: 410). This surmise can only have been founded on an assumption that the rhotic in word elements in the form C**V**r**V**C was silent, and invariably denoted a long preceding vowel, a matter already commented on (§ 7.6.2.1). Transcriptions of C_1V**r**C_2 in which 'C_2' represents any of [**k/g**], [**p/b**] or [**t/d**] were not recorded. This is consistent with the fact that there are no Palawa transcriptions of CV**rŋ** in word-final position (§ 7.6.8.1). There are a few transcriptions in the forms CV**rl** (for example

NE: gar <par**l**.le.ter.min.ner> = *hand; Wordlist*: 86), CV**rth** (for example NW: gar <war**th**.hick.ar> = *lay hold*; p.255); CV**rn** (for example N: cr <why.par**n**.de> = *whiteman's child*; p.182); CV**rm** (for example E: gar <pra**rm**.me.ne.an.nar> = *devil*; p.203); and a number of transcriptions in the forms CV**rŋ** as an initial word element (for example E: gar <na**rng**.he> = *painting themselves*: p.165). Consistently with their belief, Crowley and Dixon phonologically represented <war**th**.hick.ar> as /wa**d**^{h}iga (1981: 409). But they nowhere explain the presence of <**r**> in transcriptions in the form CV**r**C. Perhaps some transcriptions in this form evidence articulations which were not retroflexes, but to suggest that none of them are retroflexes seems improbable. It is suggested that in Palawa the articulation of retroflexes was a product of word element stressing accompanied by the accenting of the final consonant in the word element (§ 7.9). Accordingly, final segments in word elements in the forms CV**rŋ**, CV**rt**^{h}, CV**rl**, CV**rn** and CV**rm** all present as retroflexes, particularly when the word element is the first word element in a word with several word elements (§ 7.9).

Over time retroflexed segments became dissimilated, a fact attested by numerous apparent cognate word elements in the forms CV**rŋ**, CV**r**$_1$, and CV**ŋ**$_2$, in which '**r**$_1$' represents a rhotic or one of its lenited forms, and '**ŋ**$_2$' lenited forms only of the dorso-velar nasal (§ 7.6.8.1). Thus many word elements in the forms C$_1$V**rn** evidence the dissimilation of retroflexed segments originally in the form C$_1$V**rŋ**. Other evidence which supports the presence in Palawa of retroflexed segments is discussed in § 7.6.8.1. The ostensibly retroflexed segments are invariably positioned as the final segments in word elements. Crowley and Dixon (1981: 414) observe that there is no evidence that retroflexed articulations were contrastive. I would prefer to state that there is 'no strongly persuasive evidence'. Further investigation of the point cannot be undertaken in this thesis.

§ 7.6.3. Stops

Voicing and aspiration to one side, the physical actions involved in the production of the bilabial and dorso-velar stops permits little variation in their phonetic range. There is therefore no reason to believe that transcriptions of <**p/b**> do not denote segments very comparable to [**p**] and [**b**], and that transcriptions of <**k/g**> do not denote segments very comparable to [**k**] and [**g**]. As will be discussed in § 7.6.3.3 and following, the observation has little application to alveolar, dental, and laminal stops.

Comparative analysis readily establishes that Palawa word elements which varied only in the voicing of a stop as the initial segment in a word element were apparent cognates (§ 7.10).

Similar comments apply to many words with either **<m>** or **<n>** in word-initial position (§ 7.6.1.2). I thus agree with Crowley and Dixon when they state (1981: 408): 'It is clear that as in the case of most of the south eastern Australian languages [Palawa] voicing was not contrastive'.

As in the south eastern Australian languages, stops as initial segments in words tend to be unvoiced, and when initial segments in following word elements tend to be voiced, a fact also observed by Schmidt (1952: 118-121; Crowley and Dixon 1981: 408). It will be suggested that the phenomenon is consistently and adequately explained both by the stressing and accenting patterns of Palawa speech (§§ 7.9 and § 7.10), patterns which would appear to have been largely lost in the Pama-Nyungan languages; and by the relaxation of the vocal chords in certain situations (Hock 1991: 97).

§ 7.6.3.1 Dorso-velar Stops

The unvoiced dorso-velar stop was variously transcribed in English words in the early nineteenth century, and still is today. Both **<c>** and **<k>** were used to transcribe the stop when in initial position in word elements, and in that position the alternations in the transcriptions presumably reflects the perseverance of OE, French and Latin spelling conventions in the case of **<c>**, and Danish, Greek and other continental spelling conventions in the case of **<k>**. As an identifier of loan words, **<k>** can provide semantic information, but there is no evidence that **<c>** and **<k>** were used in transcriptions of Palawa words to signify either a difference in the articulation of the stop, or a difference in meaning. Except in loan words and as geminate consonants, **<c>** and **<k>** are rarely found in final position in English words. However in transcriptions of Palawa words, both **<c>** and **<k>** frequently appear as the final segment in word elements. What is also clear is that **<c>** was never used to transcribe a sibilant and, the Milligan transcriptions excepted, transcriptions of **<ch>** record palato-alveolar affricates. Similar comments apply to French transcriptions of **[c]** and **[k]** which were in the 18th century, and remain unsettled in the 21st century. Not surprisingly, there are no French transcriptions of **<ch>**. Words for beard (*Wordlist*: 105-106) provide examples of the indiscriminate nature of the transcriptions in the forms **<c>** and **<k>** by both French and English recorders. Unless they straddle a syllabic boundary, the Milligan transcriptions of **<ch>** and **<gh>** probably record aspirated articulations of unvoiced and voiced dorso-velar stops (§ 7.5.1.1). The same comments apply to the very rare Robinson transcriptions of **<gh>**.

Transcriptions of **<ck>** are never found in initial position in either English; or Palawa words. In English words **<ck>** would appear to have originally indicated that the stop was accented (§§ 7.9 & 7.10). Plausibly it was so used by the English recorders when transcribing Palawa words. In English words its use is confined to word elements in which the preceding segment is a short vowel. If the preceding segment is a long vowel, then either the vowel is repeated as in **Cook**, **Ceek** etc., or else the final segment in the word element is transcribed as **<ke>**. Plausibly, the transcription of **<ck>** in Palawa words indicates that the preceding vowel was short, and the stop accented. Milligan's dictum to the effect that in geminate consonants it was the first member of the doublet which was accented (Milligan 1890: 13) should be kept in mind. No Palawa transcriptions which are inconsistent with this observation have been identified. Plausibly, therefore, the **<e>** in Palawa word elements in the form CVCe indirectly indicates that the vowel was a long vowel (§ 7.3.1).

Table 7.6.3.1 provides examples. Bolding indicates the relevant segments in the words listed. It will be observed that **<ck>** as a transcription is in all cases in final position in a word or word element.

Table 7.6.3.1

NW: gar	rub.**rick**.kure	*palm of hand*				
W: cu	wy.mar.**nock**	*finger*	cf.	W: cu	wār'rānō**ok**	*finger*
NE: gar	no.l**uck**.el.ler	*hip*	cf.	NE: gar	lor.rer.**kone**.ner	*hip*
				NE: cr	lor.rer.co.ner	*hip joint*
NE: gar	tur.c**uck**.el.ler	*thigh*	cf.	NE: cr	ter.ker.car.lar	*thigh*
				-: wb	tūkkĕhkūllā	*thigh*
W: cr	wan.did.**ick**.er	*finger nail*	cf.	W: cr	wan.dic.**ic**.er	*finger nail*
W: cr	ha.with.**ick**.ker	*head*	cf.	NW: gar	nee.wid.de.ker	*head*
SE: gar	**noke**.ger.re	*make basket*	cf.	SE: gar	nōog.gér.rér	*make basket*

There are a small number of Palawa transcriptions of **<h>** in word-initial position, and likewise a small number of transcriptions which evidence eclipsis of a consonant in word-initial position with consequent exposure of a following vowel. Words for *hand* listed under subheading <han.ner.min.ner> (*Wordlist*: 85), and for *chin* (p.106) illustrate the point. Comparative analysis establishes that in most cases the initial segment was originally [**k**]. The next most frequent occurrence of the phenomenon involved the lenition or loss of [**ŋ**]. Examples of eclipsis involving other segments in word-initial position are very rare. The two sets of phenomena involving the dorso-velars were related phenomena. Words for *speak* (pp.399-400) preserve [**k**] as the initial segment, but words for *answer* etc. listed under subheading <oangana> (p.134)

suggest that the genesis of the dorso-velar stop in this and similar sets of words may have been a dorso-velar nasal, and that the nasal was preserved in the words for *answer* etc. as a result of marginalisation. The close nature of the relationship of dorso-velar nasals with dorso-velar stops is discussed by Dixon, both in the context of living Australian languages (1980: §§ 7.4.2 & 7.6.1), and in terms of historical linguistics (1980: § 7.5). That eclipsis was virtually confined in Palawa to dorso-velar segments is consistent with that discussion. The genesis of **[k/g]** as the initial segment in many words is consistent with lenition of the nasal. Words for *sand* listed under <nune.ner> (*Wordlist*: 139) provide a set of examples. Other examples can be viewed in words for *emu* (p.147); *hawk* (p.149); *TO HIT* (p.253); *FIRE* (p.224/225); and *LIGHTNING / Southern Lights* (p.287). The presence of **<k/g>** as the initial segment in words which do not evidence any connection with words once headed by **[ŋ]** are usually best explained by a semantic change, a subject beyond the scope of the thesis.

In following word elements, transcriptions of **<k/g>** as the initial segment typically evidence eclipsis of the original consonant, followed by epenthetic alliteration which involved a dorso-velar stop or nasal as the final segment in the preceding word element (§§ 7.6.8 & 7.6.9). Transcriptions of **<k/g>** as the final segment in word elements is usually consistent with lenition of the dorso-nasal nasal (§ 7.6.8.1).

Labiovelarization is a form of palatalisation, and historically it involves the partial assimilation of a consonant to a neighbouring back and rounded vowel. Phonetically it is characterised by a non-segmental **[w]**-like glide transcribed by a superscript *w* placed after the labiovelarized consonant. (Hock 1991: 73). The evidence for the labiovelarization of dorso-velar stops in Palawa is very strong. An analysis of words for *ear* evidencing the change, and the chain of phonological progressions which occurred after dissimilation of a labiovelarized stop, was provided in § 7.6.2.3. See also the discussion in § 7.3.1 of ***Koop.er.rer.par.tole.ler***, and ***Kobe.ber.rer.kar.tole.ler*** as place names. Further examples, but not as an exhaustive list, may be viewed in words for *arm* (*Wordlist*: 83); *chin* (p.106); *tongue* (p.111); *beach* (p.139); *cormorant* (p.143); *parrot* (p.154); *DEAF* (p.199); *TO GO* (p.237) and *GROUND* (p.244). It is to be noted that in some of these examples transcriptions of **<cr>** and **<cl>** are best explained as evidencing labiovelarization, followed after dissimilation by the replacement of **[w]** by **[r]** and **[l]**. In his discussion of proto Australian consonants, Dixon does not note the presence in the mainland languages of labiovelarized dorso-velar stops. But Dixon surmises pronunciation shifts in proto Australian in terms of **g* > w, and **ŋ* > w (1980: 174). Compare also the words listed in *Macquarie* on pages 448 and 473 transcribed with consonant clusters in the forms **/gw/**

and /kw/. It is suggested that Palawa evidences a phonological progression which typically involved [ŋ] > [k/g] > [k^w/g^w] > [w], and very occasionally a further pronunciation shift to [r].

§ 7.6.3.2 Bilabial Stops

Bedford recorded <facuna> <**ph**ocana> and <**ph**acanah> as Eastern speech words for *rain* (*Wordlist*: 369). In all his other transcriptions of bilabial stops he recorded <p/b> as the initial segment, as did all other European recorders. He probably had some knowledge of classical Greek (§ 4.1.5), and his transcription of [**ph**] probably identified an aspirated form of the stop. The transcriptions are atypical, but are reconcilable with the articulation of bilabial stops.

Milligan transcribed a <**p**> as part of a consonant cluster in the form <**mpt**> on a number of occasions, and Bedford in one word. The segment would appear to have been heard by Milligan and Bedford when closure of the nasal was followed by a slight pause before articulation of the stop. Significantly comparative analysis reveals that in Palawa transcriptions of <**mpt**> always mask a syllabic boundary. The phenomenon can be compared with the same phenomenon in transcriptions of English words. Thus the OE progenitor of *empty* was *geæmtigiant* (Hall 1931). The Milligan and Bedford words have been listed in the first column of Table 7.6.3.2(a), and apparent cognates and other comparable words which indicate the genesis of the sounds heard by them in the second column. Bolding indicates the relevant segments, and underlining the second arm of what are believed to be doubly reduplicated words.

Table 7.6.3.2(a)

SE: mj	riapoo**lumpta**	*wrist*	cf.	SE: mj	ree-mu**tha**	*fist*
E: mj	oo**lumpta**	*head*				
E: bd	olum**ptha**	*head*				
W/NW: mj	com**ptena**	*spirit of evil*		NE: cr	loo.kom**e.**ten.ner	*devil / evil spirit*
				E: jj	com**tena**	*devil*
				E: lh	com**tana**	*devil*
E: mj	murramanattya onamaru**mpto**	*long way*		SE: mj	noina **mutt**aina	*long way*
				W: gar	trow.wer.**lim.me.**ter	*long way*
E: mj	luggana golum**pte**	*strike*				
E: mj	ra**oompta**	*wombat*		E: mj	rowoo**mata**	*wombat*
				E: gar	droger**mutter**	*badger*
				SE: mj	row**itta**	*wombat*
E: mj	rene nune**mpte**	*run together*		NE: gm	tablene pini**kta**	*courir*
				N?: cr	no.**ker.ti**.va	*run.*

In discussing the presence in the mainland languages of fricatives, Dixon notes by way of an example that the progenitor of **[v]** as a segment was **[b]** (1980: 125). Later, in discussing developments in proto Australian, he refers to the progression **b* > *w* (p.174). Arguably, in many apparent cognate and other closely comparable Palawa words **[w]** and **[v]** are alternations, the latter evidencing slight friction. There is ample evidence in Palawa words and place names of a progression from **[b]** > **[v]** < > **[w]**. Table 7.6.3.2(b) provides examples.

In Table 7.6.3.2(b) the first place name example is a doubly reduplicated name, and in the second the last three syllables comprise a triple limbed item or explanatory addition. Underlining indicates the second arm of a doubly reduplicated word. The matters discussed in § 7.6.8 will need to be kept in mind in any study of the place name examples. Further examples can be viewed in word-initial position in words for *FROST* (p.233); and as the initial segments in following word elements in words for arm (p.83/4); *teeth* (p.110); *gull* (p.149); *BOAT* (p.168); *oar / bow* (p.170); *DANCE* (p.195); *DAY* (p.196); *FRIGHTENED* (p.233); *GO* (p.237); and *HIT* (p.254). In the table, bolding indicates the relevant segments in the words listed.

Table 7.6.3.2(b)

E: bdm	peg.e.na	*hair*	cf.	E: bd	wig.e.na	*hair*
E: bd	tra.ban.na	*blanket*	cf.	E: bdm	tra.van.ya	*clothing*
SE: mj	teebra poyngta	*vagina*	cf.	SE: gar	dĕevĕrrŷ	*deevery*
W/NW: mj	puggytomoorah	*stupid*	cf.	SE: gar	vage ge time pittherer	*fool*
				W/NW: mj	wayeelarraboo	*stupid*
SE: mj	paratta	*ice*	cf.	SE: gar	vawty	*icicle*
				SE: gar	worthy	*ice*

Lore.pur.rer.<u>lee.ver.ler</u>	country 'at the Arthur Mountains'			
Lob.<u>lo.hoin</u> pay.ver.roke	Ocean Beach			
***Par**.na.tee.no*	Hampshire Hills	cf.	*Var.nit.ter*	Hampshire Hills
***Pun**.te.han.ner*	country at Cape Portland		*Vane.kome.kun.ner*	country at Cape Portland
			Water.me.dene.yer	country at Cape Portland

Labiovelarization affected the bilabial stops. At its most extensive, the phonological progression involved **[p/b]** > **[p^w/b^w]** > **[w]** > **[r]**. Table 7.6.3.2(c) provides examples. In the table, bolding indicates the relevant lexeme(s), and underlining indicates the second arm of a doubly reduplicated word. The words in the left hand column do not exhibit labiovelarization, whilst the words in the right hand column do. Although not as a complete list, other examples can be viewed in the groups of words sublisted under <pue.ne.ac> and <pue.ne.min.ner> (*BURN*; *Wordlist*:

177); <poonar>, <way.ne.a.na> and <wib.ber.ler> (*SMOKE*; p.398); <paul.er.car.ner.pare> <rinnca> and <wungcarne> (*SPEAK*; pp.401-402); <bue.ger.ner>; <pueneer> and <rannyana> (*SWIM*; p. 420-21); and <breona>; <pounerala>; <pul.ler.ter>; <walewunner> and <wunha> (*FISH*; pp. 449-451). In the table, bolding indicates the relevant lexeme(s).

Table 7.6.3.2(c)

-: lh	**putuna**	*black hawk*	cf.	E: jj	**pue**ta	*black hawk*
				SE: gar	**wil**.ler.de	*hawk*
SE: mj	**punna**	*bird*	cf.	SE: gar	**pue**nonner	*very small bird*
				- ; sn	**pōo**thĕrĕnnĕr	*sparrow*
				E: mj	**poi**tenena	*blue wren*
				E: mj	**way**elimna	*swallow*
				SE: gar	**wee**.ne.re	*goldfinch*

Table 7.6.3.2(c) continues

				SE: gar	**vee**ner.er	*honeybird*
SE: mj	**poggona nee <u>wughta</u>** *add to*		cf.	SE: mj	**poany <u>pueré</u>**	*intersect*
				E: mj	**unginna<u>puee</u>**	*intersect*
				SE: mj	**wu**ggara tungalé	*put across / place across*

§ 7.6.3.3 Alveolar Stops

Transcriptions of **<t/d>** in Palawa words are ambiguous. Hypothetically, they can denote a segment articulated as a post-alveolar stop, an apico-alveolar stop, a post-dental stop, or an inter-dental stop. In English post-alveolar stops and apico-alveolar stops are not contrasted (Crystal 1995: 244). In French the alveolar stop was replaced by a dental stop, and there is no contrasting of post-dental stops with inter-dental stops. This French development was in place before the end of the 18th century. As a consequence, transcriptions of **<th>** became redundant, a fact which probably explains the complete absence of French transcriptions of **<th>** in Palawa words. See later in the thesis. In the table of consonants and semi-vowels provided by Crowley and Dixon (p.407) they make no provision for post-alveolar stops, nor for inter-dental stops. In discussing stops they do not address the possibilities that the French and English transcriptions may have denoted both apico-alveolar and post-alveolar stops, and that French transcriptions of **<t/d>** may have denoted dental stops. They state (1980: 410):

> *Apical series.* Australian languages have either one or two contrastive stop-nasal series which involve sounds made with the tip of the tongue. If there are two series one involves apico-alveolar and the other apico-post alveolar or retroflex articulation: if there is a single phonological series, there may be alveolar and postalveolar allophones.
>
> There is no evidence in the Tasmanian materials for any retroflex sounds, let alone retroflex phonemes. The evidence does seem fairly clear that all the Tasmanian languages had apico-

alveolar stop /d/, nasal /n/ and lateral /l/.

The probability that transcriptions of CVrŋ evidence a retroflex was discussed in § 7.6.2.4, and is outside the parameters of the present discussion. This subsection will investigate the evidence provided by comparative analysis with respect to Palawa articulations of the segments transcribed as **<t/d>**. At the outset, it is pointed out that neither the French nor the English recorders would have distinguished between apico-alveolar stops, and post-alveolar stops. Similar comments apply to the articulation of post-dental stops and inter-dental stops

In English **<th/dh>** are used to denote inter-dental stops, but do not distinguish between their voiced and unvoiced counterparts. Otherwise there are no English or French spelling conventions which cope with the differences in articulation referred to. Gaimard's transcriptions excepted, most of the French transcriptions of **<t/d>** involve words from (south) Eastern speech. One gets an impression that voicing was more prevalent and/or pronounced in (south) Eastern speech than it was in the other Palawa languages. Further comments will follow Table 7.6.3.3(a) In the Table bolding indicates the relevant segments in the somewhat different transcriptions of the French vis-a-vis the English recorders. Underlining indicates the second arm of a doubly reduplicated word.

Table 7.6.3.3(a)

SE fr:	mada (5 apparent cognates) *testicules / couille*					
Cf.						
SE: gar	**muth.her**	*testicles*		SE: gar	**muth.er**	*testicles*
SE: mj	**matta**	*testes / scrotum*		E: mj	**matta**	*testes*
SE: br	**mat[1]tee**	*testicles*		SE: gar	**mut.tin.ner**	*testicles*
NE: gar	pick.er.wot.ten.ner	(2 apparent cognates) *testicles*				
SE: mj	**reemutta**	*hand*		SE: mj	**.ree-mutha**	*fist*
SE: fr	**mugid**	*nose*	cf.	-: ck	**muidje**	*nose*
				SE: fr	**muguiz**	*nez*
W: gar	**lar.dip.bar**	*pelican*	cf.	NW: gar	**larth.bar**	*pelican*
				SE: mj	**lazz'leah**	*pelican*
			cf.	NW: gar	**larth.ger**	*kangaroo*
				W: cr	**lar.the.ker**	*kangaroo*
				W: cr	**lathe ker**	*kangaroo*
				-: jj	**lathakar**	*male kangaroo*
				SE: mj	**lazzakah**	*brush kangaroo*
SE: rb	**toddawadda**	*come here*	cf.	SE: gar	**tuth.er.vuth.er**	*come*
SE: mj	**tutta watta**	*come*		SE: gar	**tuz.er.vuz.er**	*come*
				SE: cr	**tuks.er.nuks.er**	*come*

Table 7.6.3.3(a) continues

E: gar	ly.notc.yer	*sea*	cf.	E: cr	li.no.tcher	*salt water*
E: mj	lia noattyé	*salt water*				
SE: jj	tackany	*go home*	cf.	?: jj	jackay	*goon*
SE: dl	tangara	*allons nous-en*				
E: mj	loanga metea	*intercourse*	cf.	SE: fr	logola maji	*fougue*

It will be noted that both the French <logola **maji**> and the English would appear to have identified fricative forms of the stops heard, and that Robinson also identified what appear to be lamino-dentals. Unfortunately there are very few other French transcriptions of **<t/d>** in words which are apparent cognates of English words, and none with **<t/d>** in word-initial position. In all the French transcriptions the sound identified would appear to have been voiced when in medial position, and geminate stops were not transcribed. Brown's transcription of a superscript number militates against the presence of voicing in the word heard by him (§ 7.3.5). Transcriptions of **<th>** are common in the Palawa lexicons. Allophonic alternations between **[t/d]** and **[t^h/d^h]** in final position also occur in English (Crystal 1995: 244), and at least hypothetically it is possible that **<th>** denotes alternations of apico-alveolar stops. Without providing an exhaustive list, examples can be viewed in *Wordlist* in the words listed under *leg* (p.98); *toe* (p.97); *head* (p.100); *HUNGRY* (p.259); *ICE* (p.260); *ant* (p.264); *potato* (p.359); *QUICK* (p.366); *RAIN* (p.369); and *RIVER* (p.373).

Whilst transcriptions of **<j>** are not common in Palawa words (§ 7.6.4.1), the transcriptions are almost invariably accompanied by apparent cognates with **<t/d>** in the same position. The only exceptions are some words for *crane / white egret* (*Wordlist*: 146). This fricative would appear to have been as an allophone of the alveolar stops. The matching transcriptions can be viewed in *Wordlist* in the words for *fine face* and *wrinkle* (p.102); *KNOW* (p.279); *LARGE* (p.281); *RISE* (p.372); *STONE* (p.410); *lungs* (p.124); and *what* (p.465). In the words for *crane / white egret*, **<y>** is the matching transcription, and may evidence a phonological progression from **[t/d]** through **[t^y/d^y]** as palatised alveolar stops, to **[j]** (see below and § 7.7.2).

The foregoing analysis points to the presence in Palawa of apico-alveolar stops, and suggests that in a series involving post-alveolar stops, the lamino-dental stops, lamino-palatal stops, palato-alveolar affricates, and palatal semi-vowels, apico-alveolar stops formed an integral step in sets of phonological progressions. Some of the progressions included a post-alveolar affricate (§ 7.6.3.4), either as an initial step, or as a final step. The presence of a post-alveolar affricate places apico-

alveolar stops squarely within the progressions, and thus firmly evidences the articulation of the latter in Palawa. The salient point is that whilst pronunciation shifts can explain phonological progressions through [t/d] in both directions, a pronunciation shift from a post-alveolar stop directly to, for example, an inter-dental stop, or vice-versa, is implausible. Dixon's proposed [dh] > [j] (1980: §§ 7.4.2 & 7.5) has been noted, but I have found no evidence for a direct progression of this type in the Palawa languages. The evidence Dixon was considering may, of course have been consistent with progressions which included both unvoiced apico-alveolar stop and palatalised stops as intermediate steps. I also note that he appears to be unaware of the presence of post-alveolar affricates as segments in either Palawa or south eastern Australian words (§ 7.6.3.3; cf. also Crowley & Dixon 1981: 411). Table 7.6.3.3(b) sets out the progressions referred to.

Table 7.6.3.3(b)

[dr] < > [d] > [d^h] < > [t^h]
> [t] < > [t^y] > [j]
> [d^y] < > [t^y] > [j]
> [d^j] > [t^j] > [j]
> [t^r] > [r]

The articulation of [tj/dj] as a segment was rare in Palawa (§ 7.6.4.1), and very rare in medial position. This affricate excepted, the words in Table 7.6.3.3(c) evidence the progression referred to. In comparing the words, the affect of eclipsis and epenthetic alliteration should be kept in mind (§ 7.6.8).

Table 7.6.3.3(c)

E: gar	dray.han.ner	*female tarrer*	cf.	N: gar	try.lare	*brush kangaroo / doe*
				N: gar	tar.rul.	*boomer*
W/NW: mj	dyekka namenera	*growl*	cf.	N: cr	tarl.tri.ner	*cranky*
				E: mj	tagantyenna	*crazy / cranky*
				N: cr	yoke.er.nur.rer	*sulky*
E: gar	nōriddŷāck	*bad*	cf.	NE: cr	no.go.the.uck	*no good*
				E: mj	nowatty nieleebana	*ugly*

There are no French transcriptions which suggest that any of the stops identified by them were dental stops. On the contrary, the voiced <d> in their words for *testicules / scrotum* suggests that

the sound identified by Robinson and Milligan when they transcribed unvoiced geminate stops, was not a dental either.

Perhaps the best evidence for the articulation of apico-alveolar stops in Palawa is the fact, that with the exception of Milligan, none of the European recorders saw fit to comment on the articulation of the stops they were transcribing as **<t/d>**. Milligan stated (1890: 12) that 'The Orthography of the Aboriginal Vocabulary agrees as nearly as possible with the ordinary expression of the English alphabet ...' Furthermore, his comparisons of vowel articulations with French articulations suggests that had he identified post-dental stops (1890: 12), he would have drawn attention to the fact. The matters referred to also suggest that the segment denoted by **<th>** was essentially similar to the English lamino-dental stop, and not an interdental stop.

There is another set of phonological progressions confined to the initial segments in following word elements, which involve transcriptions of **<r>**, **<l>** and **<t/d>**. The set was discussed earlier at the end of § 7.6.2.1, and some examples provided. The instability of the liquids (Hock 1991: 108), plus dissimilation of the rhotic, adequately explains the shifts between **<r>** and **<l>**. Some of these may evidence alternations in the identification of a liquid by its recorder. In a number of words the final segment in word elements is transcribed as **<t>**, and more rarely as **<d>**. This evidences a natural pronunciation shift from [l] > [t], a surmise supported by NE: cr <per.**tl**o.ter.ner> = *frog* (*Wordlist*: 452). Shifts involving [l] < > [t] are not noted by Dixon in his discussion of laterals and their correspondence as sets with alveolar stops and nasals (1980: § 7.4.3), but its phonetic plausibility is referred to by him in proposing a proto Australian set of consonants (p.175). Some other Palawa examples are given in Table 7.6.3.3(d). It will be noted that transcriptions which ostensibly record geminate consonants are common. Factors which led to the articulation of a [t] may have included both anticipatory and perseverant assimilation. Its preservation may have been affected by semantic factors.

In the following table, bolding indicates the relevant segments. Underlining indicates the second arm in what are believed to be doubly reduplicated words. The **<l>** in <randla> and <nar.rul.pe**t**.lar> may evidence semantic assimilation of the final word element to *lia (§ 7.6.2.2).

Table 7.6.3.3(d)

W: cr	te.ver.mur.ick	*wrist*	cf.	SE: mj	ree – mu**tha**	*fist*
W: mj	reea-rarra	*palm of hand*		SE: mj	reemu**tta**	*hand*
				W/NW: mj	oo**tta**mu**tta**	*left hand*

Table 7.6.3.3(d) continues

SE: mj	marah	*five*	SE: gar	nore.der	*left hand*
				NE: gar	parl.le.ter.min.ner *hand*
			NW/N: jj	rabalga	*hand*
NE: cr	tor.rang.ar.ti.lare	*five*			
-: gar	pal.le.wot.ten.ner	*finger*	cf. E: gar	pel.te.wot.ten.ner	*finger*
NE: gar	parl.terme	*finger*			
?: wn	nuwarra	*duck*	cf. E: bd	wood.tha	*bird*
SE/W:	wur.rah	*black duck*	SE: gar	wore.raddy	*duck*
SE: mj	woaroiré	*duck*			
			-: wn	randla	*platypus*
			N: cr	nar.rul.pet.lar	*swan*
-: ar	mungaralh	*head*	NE: gar	mo.kel.te	*head*
NE: cr	mu.rane.ne	*run*	cf. W: jj	mella	*run*
N: cr	mar.lune.wat.a.ke	*run quick*	E: jj	moltema	*run*

§ 7.6.3.4 Post-alveolar Stops

As noted in § 7.6.3.3, the articulation in Palawa of post-alveolar affricates virtually establishes the articulation of alveolar stops. The alternation in English pronunciation between post-alveolar and apico-alveolar stops suggests that in Palawa there was the same alternation. The discussion of post-alveolar affricates in § 7.6.4.3 provides further evidence.

§ 7.6.3.5 Lamino-dental and Lamino-palatal Stops

Crowley and Dixon included both lamino-palatal and lamino-dental stops in their chart of consonants and semi vowels (1981: 407). They expressed their surmises with respect to laminal stops as follows (1981: 407):

> All mainland Australian languages have sounds which involve the blade of the tongue. In some languages there is a phonological contrast between lamino (inter) dentals ... and lamino-alveolar palatals ...; in others there is a single laminal stop and nasal, but each may have lamino-dental and lamino-alveolar palatal allophones.
> The evidence for a lamino-alveolarpalatal stop occurring in Tasmania lies in the frequency of spellings such as *ty* and *tch* ... It is highly likely that [the lamino-dental stops] were members of a single phoneme– that is the lamino-dental stop could sometimes involve some friction, as it does in many Australian languages.

It is pertinent to add that Hock states (1991: 132):

> As in the case of the liquids and sibilants, [thorn and eth] commonly are mastered quite late in first language acquisition. It is therefore not surprising that they should prove to be fairly unstable in linguistic change.

The general points made are accepted. In comment, **<ty>** as a Palawa transcription is frequent, but **<tch>** and **<ch>** very infrequent. Spellings of **<tch>** appear once in a Brown transciption, thrice in transcriptions of George Augustus Robinson, and otherwise are confined to a small

number of transcriptions of Charles Robinson. There are a few transcriptions of **<ch>** by Charles Robinson which would appear to transcribe pronunciation variants of **<tch>**. For reasons unknown, Crowley and Dixon do not refer to transcriptions in the forms **<dy>** and **<th>**. Consistently with Hock's observation, the transcription in many words of **<th>**, **<ty>**, **<dy>** and **<tch>** record segments in what appear to be one or more sets of allophones. Other transcriptions to which the comment applies, and which appear to be transcriptions of both voiced and unvoiced palato-alveolar affricates, are **<j>**, **<ts>**, **<ks>**, **<s>**, **<st>**, **<sk>**, **<z>** and **<zz>**. Transcriptions of **<j>** excepted, it will be suggested that these other transcriptions evidence the occasional aspiration of segments, a surmise which in all cases is supported by comparative analysis, and that the sounds articulated were allophones of these other segments (§ 7.6.4). The presence of the laminal stops in the Palawa languages is attested by transcriptions of **<ty>**, **<dy>** and **<th>**. As noted, the palato-alveolar affricates can be included in the same class of allophones. In apparent cognates, they are often replaced by alveolar stops.

Crowley and Dixon continue (1981: 409 and 410):

> It remains to enquire whether Tasmanian had a contrast between two laminal stops. This question is, in fact, impossible to answer from the data available.'
>
> ...
>
> We can conclude that Tasmanian certainly had at least one laminal stop, and that there were both lamino-dental and lamino-palatal sounds, at the phonetic level. The question of whether there was a laminal contrast at the phonological level cannot be given an answer from the data available.

As discussed in § 7.6.3.4, it is my belief that the laminal stops in word-initial position had their genesis in post-alveolar affricates, and that together the three segments typically formed a set of allophones. The data cannot be fully assessed in the absence of a full exposition of Palawa morphology and the semantic changes which affected Palawa words. Nevertheless, a plausible case can be presented in support of the proposition. As might be expected, there are no transcriptions of **<dh>**, a digraph which was not a spelling convention in early nineteenth-century written French or English. Transcriptions of **<th>** never appear in word-initial position, but appear as the initial segment in following word elements, and as a final segment in word elements more generally. Nor do they ever appear in word-final position. By way of contrast, transcriptions of **<ty/dy>** appear in both word-initial and word-final position, and in initial position in word elements. Except as syllabic morphemes, **<th>** never appears as the final segment in word elements. Voiced and unvoiced lamino-dental stops in word-initial position are relatively common in the south eastern Australian lexicons (*Macquarie*: pp.427-430 & 53-545). Whatever other inferences can be drawn from these differences in the transcriptions of laminal stops in

Palawa, they suggest that vis-a-vis each other the articulation of lamino-dental and lamino-palatal stops was at least partly conditioned by stress and accenting patterns, and in turn that in most contexts they formed a set of allophones.

There is some evidence of the preservation and/or epenthesis of both types of laminal stops as syllabic morphemes. In NW: gar <lar**th**.bar> = *pelican,* it is clear that the bolded segment is vestigial of, and preserves the second word element in the progenitor, of both <larth.bar> and W: gar <lar.**dip**.bar> = *pelican.* Plausibly in -: gar <lue**th**.ner>, but less plausibly in NE: gar <true**th**.kar.gen.er> = *pot* (*Wordlist*: 359), it can be inferred that the bolded segment is vestigial of the second word element in contracted words; vestigially preserved because of their semantic connotations. The connotations of [**d**^{r}] as a segment include aspects of magnitude. The same connotations would appear to have been conveyed by [**d**^{h}] and [**t**^{h}] as allophones of [**d**^{r}], and as will be discussed below also at times by [**d**^{y}] and [**t**^{y}]. Thus in E: bdm <mon.gra.ni**th**.ka> = *bad/ disagreeable* (*Wordlist*: 136), the presence of the segment cannot be explained as a product of either anticipatory or perseverant assimilation. But although the point can't be pursued here, the segments can be explained as a semantic assimilation which indicated an aspect of magnitude. Similar comments apply to SE: mj <nea**th**kar> = *osprey* (p.150), a supposition strengthened by the absence of the segment in the other similarly constructed words for eagles and hawks. The matters discussed in this paragraph can be compared with *lia as a qualifier and suffix (§ 7.6.2.2).

Over time both bleaching and transfers in meaning can blur or alter the connotations of segments incorporated in words. Accordingly, whilst it is a matter of impression, the post-alveolar affricates and the laminal stops would all appear to have once connoted one or more aspects of magnitude. The term 'magnitude' is used in its most general sense. Thus it is used not only to denote large physical size, but also large temporal events, pluralities, great strength; and in terms of emotional states, deep feelings etc. As a random sample I have examined the words which incorporate post-alveolar affricates and laminal stops as listed in *Wordlist* on pages 200 through to 250. Words with appropriate transcriptions in the forms **t**VV and **y**VV are included in the words listed under *DECEPTION*; *DEEP*; *DEFECATE*; *DEVIL*; *DIRECTION* (points of the compass); *DIRTY*; *DISEMBOWEL*; *DISTANT*; *DIVE*; *DRY*; *EARTHQUAKE*; *EXCLAMATION*; *FAECES*; *FAT* (as in girth); *FEEL* (as in touch / knead etc.); *FIRE*; *FLATULENT*; *FLOWER* (but only as a word for (white) blossom); *FOOLISH*; *FOREST*; *FRIGHTEN*; *FROST*; *FULL*; *GIRL* but only in a qualifier meaning *growing*); *GIVE*; *GOOD*; *GOOD SPIRIT*; *GRASSLAND*; *GREEDY*; *GREEN*; *GROUND*; *GUN*; *HANG*; *HAIL*; *HEAR*; and *HEAVEN.* The segments are not present in words listed under *DESCEND; DIG; DREAM; DRINK;* (cf. subheading *Thirsty*); *EAT;*

ECHO; ENOUGH; FALL; FAMILY (cf. 'big brother'); *FENCE; FIDDLE; FIGHT;* (but suffixes such as <tć> in words listed under those headings are probably vestigial of a lamino-palatal stop); *FINISH*; *FIRESTICK*; *FIRST*; *FLY*; *FOG*; *FORGET*; *FRIEND*; *FUR*; *GO* (excepting words for *vanish*); *GROW*; *HARD* (there are suffixes in the forms <lé) and <ta>); *HASTEN* (ditto); *HEATHLAND* (ditto); *HEAVY* (ditto); *HELP;* and *Here / There.*

Lamino-palatal stops in word-final position more probably evidence a semantic change rather than a pronunciation shift. As a result of the change a dorso-velar nasal was replaced by a lamino-palatal stop to indicate an aspect of magnitude. In a few words the segment transcribed was a palato-alveolar affricate as an allophone of a laminal stop. Further exposition and assessment of the evidence for this surmise is beyond the scope of this thesis.

§ 7.6.3.6 Genesis of Apico-alveolar, Post-alveolar and Laminal Stops

A full discussion of the genesis of these stops would involve a discussion of semantic changes, and is beyond the scope of this thesis. But partly as a caveat, and partly as a summary of a number of matters already adverted to, attention is drawn to the phonological progressions associated with the transcription of these stops, post-alveolar affricates and apico-alveolar stops. Phonological progressions in word-initial segments in the form **[d^{r}] > [t^{r}] > [t/d]** are well evidenced (§ 7.6.3.3). Hypothetically, the reverse change from **[d]** to **[d^{r}]** can also be suggested as an occurrence which may well have been a continuing phenomenon triggered by onomatopoeic and/or semantic considerations. Similarly progressions and/or alternations involving **[d^{r}]**, **[d^{h}/ t^{h}]**, **[d^{y}/ t^{y}]**, and **[d^{j}/ t^{j}]** are well evidenced in apparently cognate words and names.

§ 7.6.4 Fricatives

Post-alveolar affricates excepted, transcriptions of what were ostensibly fricatives are rare in the Palawa lexicons. There can be little doubt that typically they evidence the aspiration of an alveolar stop, and as such that they were in most cases allophones of the alveolar stops. The possibility that some of the segments transcribed were originally articulated as post-alveolar affricates, or else onomatopoeic in nature was adverted to above.

§ 7.6.4.1 Palato-Alveolar Affricates

These affricates are relatively common as word-initial segments in the south eastern Australian lexicons (*Macquarie*: 431-433; 451-455). They are rare in Palawa, were usually transcribed as **<j>** and **<dj>**, and were never transcribed as **<gè>**. All Palawa words which ostensibly incorporate the segments have been listed in Table 7.6.4.1. As the comparable words placed in Table 7.6.4.1 indicate, the affricates present as allophones of apico-alveolar stops, but the phonological progression may have been from post-alveolar affricates more directly to lamino-palatal stops, with accompanying palatalisation. The interrogative words and phrases included in the Table provide supporting evidence. Charles Robinson transcribed medial segments in the forms **<ch>**and **<tch>**, and it will be suggested that these transcriptions evidence the palatalisation of a post-alveolar affricate (§ 7.6.4.3). In any event there is no evidence that the affricates were contrastive with alveolar stops, or with laminal stops. In the words for crane dissimilation or lenition led to the articulation of the initial segment as **[j]**.

In the Table, bolding indicates the relevant segments. Words in the left hand column incorporate transcriptions of palato-alveolar affricates, and apparent cognates have been placed in the right hand column.

Table 7.6.4.1

SE: ck	muid**je**	*nose*	cf.	SE: dl	mugi**d**	*nez*
				SE: dl	mugui**z**	*nez*
E: gar	**j**an.nen.ner	*crane*	cf.	E: gar	you.nen.ner	*crane*
				E: mj	yennenah	*white egret*
?: jj	**j**ackay	*go on*	cf.	SE: jj	**t**ackany	*go home*
				SE: dl	**t**angara	*allons nous-en*
SE: fr	nide**j**o	*I do not understand*	cf.	SE: fr	nidegô	*je ne sais / comprends pas*
SE: fr	nide**j**o	*je ne sais / comprends pas*				
-: sn	**j**ăckĕrōmĕnār	*big / large*	cf.	SE: mj	**t**unghabé	*straight*
				E: mj	**t**eeunna	*big*
				E: mj	**t**akkaro deleeban righ eleebana	*tall*
?: wn	**j**aku	*get up*		E: mj	**t**akumuna	*rise*
SE: fr	logola ma**j**i	*fougue*	cf.	E: mj	loanga me**t**ea	*intercourse*
W: cu	**j**aleap	*stone*	cf.	?:sn	**t**ēewār**t**ĕār	*stone*
				E: sc	**t**eroona	*knife / flint*
E:gar	**j**ac.e.nor.er	*lungs*	cf.	W: gar	**d**raker	*lungs*
				E: mj	**t**iakrangana	*entrails*
SE: gar	wo.**j**em.men.er	*what for*	cf.	NE: cr	yun.**ch**ar.le.nin.co.what.te	*what's your name*
				E: cr	whale.cor.ne	*what's your name*

§ 7.6.4.2 Voiced Labio-dental Fricatives

The extremely rare Palawa transcriptions of **<f>** are aberrant, and in at least one case a copying error (§ 7.5.2). Transcriptions of both **<f>** and **<v>** are extremely rare in the south eastern Australian lexicons. None are recorded in word-initial position in *Macquarie;* only two by Blake in Woiwurrung (1991: 118); and there is only one Victorian place name (Clark & Heydon 2002: 226). However, transcriptions of **<v>** are not infrequent in Palawa words and place names. In word-initial position the segment presents as an aspirated variant of the labio-velar semi-vowel. Part A of Table 7.6.4.2 lists all examples identified in *Wordlist.* However,as the words for *warm,* and a large number of words for *man* listed under the subheadings <par.ler.var>, <pe.her.te.mut.ic.ker>, <per.nart.he.me.can.ner>, <pleel.pun.nal.ler> and <poonamena> (*Wordlist*: 316-317) suggest and confirm, their genesis was in natural pronunciation shifts from **[b]** to **[v]**, and ultimately in most words to **[w]**. However, the words and place names in Part B evidence aspiration of **[w]** in word-initial position. Part C provides examples of the fact that rhotics in medial and final position in word elements often lenited to approximants and/or labio-velar semi-vowels. In a few words aspiration of the semi-vowel produced a sound identified by the European recorders as **[v]**. The sound shifts referred to will be further discussed in § 7.7.1.

In the Table, bolding indicates the relevant segments, and underlining indicates the second arm in a doubly reduplicated word. Words which incorporate transcriptions of **<v>** have been placed in the left hand column, and apparent cognates which incorporate transcriptions of **<w>**, or other lented forms, in the left hand column.

Table 7.6.4.2

Part A

-: lh	vaiba	*black man*	cf.	-: sn	wībār	*black man*
NW: gar	vi.per	*native of NSW*		-: ar	vibo	*black man*
SE: gar	veen.ny	*warm*	cf.	E: mj	peoonyack	*warm*
E: gar	poom.ven.yer	long.en.er.mer *warm weather*				
				E: mj	pewenya **poeena**	*spring* (the season)
-: ar	laba vena	*white man*	cf.	NW: gar	luttewin	*white man*
-: lh	lusivina	*man*				
-: ar	luta vena lubra	*white woman*		E: mj	ria lowana	*white woman*
				SE: rb	reigina louanina	*white woman*

Lore.pur.rer.lee.ver.ler (country 'at the Arthur Mountains'

cf. *Loe.won.tume.me.ter* (region N of 'Arthurs Mount')

Lob.lo.loin pay.ver.roke (Ocean Beach) cf. *Loo.min.de.with.er.roke* (Ocean Beach)

Table 7.6.4.2 continues
Part B

SE: gar	vūe.tūe	*moon*	cf.	E: cr	we.tar	*moon*
SE: gar	vetea	*moon*		SE: mj	weetah	*moon*

Vare.te.coop.pen.ner	(Preservation Island)	cf.	*Way.ter.ko.bun.er*	(Waterhouse Island)
Ve.lot.er	(St.Valentines Peak)		*War.loun.dig.er.ler*	(Cradle Mountain)
Var.nit.ter	(land between *Mt.Housetop & Hampshire Hills*			
			War.nit.ter	(Mt.Housetop)

Part C

SE: gar	novilly	*no good*	cf.	E: gar	nō.rid.dŷ.ăck	*bad*
				-: sn	nōrīddĭăck	*no good*
				E: mj	nowatty nieleebana	*ugly*
E:gar	trār.vĕl.lār.tĕr	*going up*	cf.	NW: gar	tu**d**.dy.wad.dy.nid.dic	*road*
	trove.ve.ne.tar	*upright*				
NW:gar	dror.rove.ver	*night*	cf.	NW:jj	crowrowa	*night*
N:cr	pare.to.ver	*quick*	cf.	N: cr	pare.to.wer	*quick*

§ 7.6.4.3 Post-alveolar Affricates

Orthographical sequences in the forms <**dr**> and <**tr**> were transcribed in a large number of Palawa words, nearly always in word-initial position. The phonological progressions discussed in § 7.6.3.3 suggest that the sequences record a single segment, and not a consonant cluster. I have chosen to represent the segment in phonetic transcriptions by /**d**^{r}/ and /**t**^{r}/. Kaurna /**trukko**/ = *inside* is the only word with such a sequence listed in *Macquarie* (p.168). Without the benefit of any comparable words, there is a possibility that the sequence in the Kaurna word evidences the eclipsis of a medial vowel, and not a single segment. There are also some Victorian place names with the same orthographical sequence (Clark & Heydon 2002: 77 and 220-221). However, in the case of the names for streams, the genesis of the segment is uncertain, and a matter which cannot be explored further in this thesis. Katithan**dr**ra as a name for Lake Eyre (cf. Kaurna /tarni/ = *sea*), Woiwurrung /**dr**angbulabil/ = *musket / gun*, and Diyari /nan**dr**ra-rna/ = *to hit* (cf. SE: fr <kin**dr**ega> = *beat;* N: cr <mar.ner.nun.**de**.a.nar.rer> = *I hit you*: and -: sn <rīāgŭrnĕr> = *strike*), are the only other words I have identified in the materials immediately available to me. Part A of Table 7.6.3.4(a) lists some Palawa place names which evidence the relevant phonological progressions discussed in § 7.6.3.3, together with some surface forms in the south eastern Australian and Palawa lexicons. There are, however, a large number of south eastern Australian words and names headed by [**d**^{j}], [**d**^{h}] and [**t**^{h}], a significant number of which have apparent Palawa cognates if for the affricates and lamino-dental stops there is substituted the segments listed in the phonological progressions which include [r] as a lenited form. Crowley and Dixon inferred that transcriptions of <**d**^{r}> denote a tapped rhotic (1981: 411), and it may

be significant that commentaries on the Pama-Nyungan languages do not discuss the existence of post-alveolar affricates as segments. The reason for including a reference to mainland materials in this subsection, is to indicate that the Palawa articulation of a post-alveolar affricate would appear not to have been a unique phenomenon.

Examples have been listed in Part B of Table 7.6.3.4(a). In the table, bolding indicates the relevant segments. The inclusion of words with elements headed by lamino-dental stops is on the basis that [d^{j}], [d^{h}] and [t^{h}] can be interpreted as alternations and/or allophones. In comparing Palawa words with Pama-Nyungan words the fact that eclipsis and epenthetic alliteration (§ 7.6.8) will have affected the form of following word elements needs to be kept in mind. Underlining indicates the second arm in a doubly reduplicated word. In the Bundjalung words listed in *Macquarie* [d^{j}] is phonetically represented by /j/.

Table 7.6.4.3(a)

Part A

Palawa			**Pama-Nyungan**		
***D**robe.ber.ler Mar.gen.ner*	Pipers River (estuary)	cf.	***Drum-bul-a-bul***		Western Port
***R**oob.bel.er Marng.en.er*	Pipers River (estuary)				
***T**ebramaykunna*	Swan River country				
N: cr **d**ull.**dr**i.la	*lake*	cf.	***R**upeal*		Rupeal Swamp
			Woiwurrung	**d**uul	*marsh*
Po.meen.tate.er.kun.er	Eastern Marshes		Woiwurrung	turkeeth	*marsh*

Part B

Palawa			**Pama-Nyungan**		
-: wn	**tr**u**t**i**a**na	*eagle*	Sydney	**dj**amul**dj**amul	*kite*
			Woiwurrung	**dj**art-**dj**art	*nankeen kestrel*
N/NW: jj	tenalga	*laugh*	Sydney	**dj**anaba	*laughter*
N/NE/E: gar	tig.gen.ner	*eat*	Sydney	**dj**anga-	*chew*
-: sn	teg'ŭrnĕr	*eat*	Woiwurrung	**dh**anga-	*eat*
SE: ck	teegera	*eat*	Warrnambool	**th**aaka	*to eat*
E: mj	tuggana	*eat*	Bunganditj	**dh**irr	*to eat*
			Bundjalung	**j**a-	*eat*
E: gar	**d**ee.me.ran.ne.nar	*drink*	Warrnambool	**th**a**th**a	*to drink*
-: sn	tēmōkēnūr	*drink*	Bunganditj	**th**a**th**a	*to drink*
E: mj	tuggara maleetyé	*white juice*	Woiwurrung	**dj**aak	*resin / gum*
			Bundjalung	jambirlangu	*sap*
NE: gn	tiougle	*pisser*	Bundjalung	**j**aluba-	*urinate*
			Bunganditj	**th**alaban	*urine*
			Dhudhuroa	**dj**iwa	*urine*
NW/N: jj	talawa	*rain*	Diyari	**th**alara	*rain*
tar.**th**e.ver	*rain*	Bunganditj	**t**urlo	*early rain*	
ty.wor	*rain*	Warrnambool	**t**ulol	*rain*	
E: gar	**tr**angelteyuck	*kiss*	Diyari	**j**ampa-rna-	*love*
-: sn	trōkēnūr	*copulate*	Warrnambool	kiyan tipu	*love*
			Bundjalung	tuwinbiyawa	*kiss*
			Dhudhuroa	**dh**umagu	*kiss*
W: jj	tullanee	*tongue*	Woiwurrung	**dj**alang	*tongue*
			Warrnambool	**th**alayn	*tongue*

Table 7.6.3.4(a) continues

			Bundjalung	**j**urguŋ	*tongue*
			Bunganditj	**th**ala	*tongue*
W: cu	trēek	*neck*	Bundjalung	**j**alayn	*neck / throat*
E: cr	to.len.ner	*throat*	Bundjalung	**j**aabi	*neck*
N: gar	tur.lare	*thigh*	Woiwurrung	**dj**arrang	*thigh*
NE: cr	ter.ker.car.lar	*thigh*	Warrnambool	**t**arrap	*thigh*
E: cr	ter.ner	*thigh*	Bundjalung	**j**araŋ	*leg / thigh*
-: sn	trūngūrmārtēenēr	*thigh*			
E: gar	toe.ger.long.er.tar	*foot*	Wiradjuri	**j**inang	*foot*
			Bundjalung	**j**inaŋ	*foot / thumb / toe*
			Woiwurrung	**dj**inang	*foot*
			Warrnambool	**th**inang	*foot*
			Bunganditj	<**d**innang-ein>	*foot*
			Bunganditj	<**dh**inna>	*foot*
W: cr	tar.la.tithickker	go	Woiwurrung	**dj**idhu	*go*
NE: gar	top.pel.teen.ne	*go fast / make haste*	Bundjalung	**j**uluhya-	*go down*
			Bundjalung	**j**amarra	(male) *kangaroo*
			Diyari	**j**ukurruhu	*kangaroo*
NE: gar	trun.han.her	*female tarrer*	Woiwurrung	**dj**imbanggur	*kangaroo*
N: gar	try.lare	*brush kangaroo / doe*	Bunganditj	tolayt	*small kangaroo*
W: gar	toe.wer.rer	*goanna*	Bundjalung	**j**iruhŋ	*goanna*
			Bundjalung	**j**iwah	*monitor*
SE: mj	toorah	*iguana*	Woiwurrung	**d**urrop	*lizard*
			Woiwurrung	**dh**ulin	*goanna*
			Warrnambool	turrutkil	*lizard*
			Warrnambool	turrutjal	*lizard* (smallest size)
W/NW: mj	rounna rawannah	*snake*	Ngiyampaa	**th**urru	*snake*
			Paakantyi	**th**urru	*snake*
			Woiwurrung	**dh**arrandel	*snake*
			Bunganditj	t'rrop	*snake*
			Dhudhuroa	**dj**udjuwa	*snake*
SE: gar	dray.dee	*wattle tree*	Bundjalung	**j**ail	*tree*
NE: gar	trow.wearne.ner	*peppermint*	Woiwurrung	tirba twebin	*eucalyptus fissilis*
NE: gar	tool.ler.ler	*peppermint*	Woiwurrung	**dh**agurn	*yellow box*
E: mj	rialimne	*blackwood*	Bunganditj	<**d**aar>	*tree*
NE: gar	treet.ten.ner	*fern tree / leaf stalk*	Woiwurrung	**dj**irrang	*leaf*
SE: fr	driué	*leaf*	Warrnambool	wurn tantaluk	*fern tree*
			Warrnambool	**th**irrang	*leaf*
			Dhudhuroa	**d**urrung(g)urru	*light*
-: jj	tretetea	*light*	Bundjalung	**j**alŋay	*bright / flame / light*
E: mj	tonna	*fire*	Woiwurrung	**dj**iel-warrk	*fire drill*
SE: mj	toiberry	*ashes*	Wiradjuri	**dh**aaguun	*ash*
W/NW: mj	roughtuly né	*ashes*	Warrnambool	**th**alap	*light*
			Warrnambool	**th**aarwan	*lightning*
NW: gar	tar.de.war	*rain*	Bundjalung	**j**an-gahy	*wet*
W: gar	tar.the.ver	*rain*	Woiwurrung	**dh**ayalk	*rain*
			Warrnambool	**t**ulol	rain
			Bundjalung	**t**urlo	*early rain*
W: gar	trow.wer.lim.me.ter	*long way*	Woiwurrung	**dj**iyu	*far*
W: gar	to.long.er	*there*	Woiwurrung	**dj**u	*there*
			Bunganditj	<**d**ay> / taa	*there*
W: gar	drardetemenwardeker	*hut, house*	Woiwurrung	**dj**udjurrp	*breakwind*
E: mj	oortrackeomee	*bush sleeping place*	Woiwurrung	<wan**dy**angan>	*sleepy*
W: gar	taytiddic	*greedy*	Woiwurrung	**dj**urring	*greedy*
NW:	tee.tar.ne.teeb.bener	*greedy*	Warrnambool	**y**unamitarrinang	*greedy*
			Bunganditj	**r**anglu	*greedy*
E: gar	nō.rīd.dŷ.āck	*bad*	Warrnambool	**ng**amin**dj**aarr	*bad*
NE: cr	no.go.the.uck	*no good*	Bundjalung	**j**aŋ	*bad*

Table 7.6.3.4(a) Part B continues

Palawa		Pama-Nyungan			
SE: mj	terannah	*bones of skeleton*	Warrnambool	ngamintjaa(rr)	*skeleton*
SE: gar	tueray	*kangaroo backbone*			
NE: cr	tinto	*sun*	Warrnambool	**th**in**dj**it	*moon*
			Bunganditj	**dh**irrang	*sun*
			Bunganditj	**th**un.ngam	*moon*
SE: rb	daledjae	*star*	Woiwurrung	**d**urt-bairram	*star*
			Woiwurrung	**dh**arranggalk	*comet*
E: mj	puggarectya	*shooting star*	Warrnambool	pun**dj**il	*star*
E: gar	plūg.gēr.tče.brĕr	*star*	Warrnambool	pipit**j**i kupen	*small star*
			Warrnambool	pun**dj**il	*star*
			Bunganditj	**th**aman-**th**aman	*star*
			Bunganditj	tamanbangalam	*constellation*
			Dhudhuroa	**dj**imbuwa	*star*
N: cr	by.ar.ty	*two*	Woiwurrung	bin**dj**irru	*two*
N: gar	par.le.the.meen.er	*two*	Warrnambool	pula**tj**a	*two*
			Bunganditj	buwa**tj**	*two*
			Bundjalung	**j**in**dih**n	*many*
NE: cr	pietherpullta	*old woman*	Woiwurrung	bad**j**urr	*Aboriginal woman*
			Warrnambool	<pun**dj**ilkirrang-yaar>	*married woman*
			Bundjalung	**j**algayn	*woman*

Schmidt identified Palawa words with transcriptions of **<d>** in word-initial position as dentals, and did not distinguish the half-dozen words known to him with **<dr>** in word-initial position from **<d>** (1952: 124). Crowley and Dixon identified transcriptions of **<dr>** as tapped rhotics (1981: 411; § 7.6.2.3). No Palawa words with transcriptions of **<dr/tr>** in initial position have been identified as consonant clusters. In other words comparative analysis of the word elements so headed with apparent cognate and other closely comparable words almost invariably reveals the presence of comparable elements with **<d>**, **<t>**, **<th>**, **<dy>**, **<ty>**, **<j>** etc. in initial position, and there are no closely comparable word elements which point unequivocally to word elements with **d**V**r** and **t**V**r** in initial position. Examples are provided in Table 7.6.3.4(b). Whether or not the post-alveolar affricate had an independant genesis, or was a back formation from an accented and voiced apico-alveolar stop, or vice versa, can't be conclusively determined. What is clearer is that the post-alveolar affricates not infrequently contrast with the apico-alveolar stops, but only very rarely with laminal stops. See later.

In the Table, bolding indicates the relevant segments.

Table 7.6.3.4(b)

E: ga	**dr**ay.han.ner	*female tarrer*	N: gar	**tr**y.lare	*brush kangaroo / doe*
N: gar	tar.rul.lare	*boomer*	E: jj	**r**agana	*forest doe*
NE: gar	**dr**or.rope	*night*	NE: cr	**d**ay.ner	*dark / night*
E: mj	tagrummena	*night*	SE: jj	**r**orook	*night*

Table 7.6.3.4(b) continues

SE: gar	dring.he	*fungus on gum tree*	SE: gar	tree.wu.rrar	*punk*
NE: gar	two.wer.er	*bread fruit* (native bread)	SE: gar	tuvara	*fungus on gum tree*
			?: gar	ring.he	*fungus on gum tree*

Words such as *drat* and *drench* in English, and δράχων = *dragon* and δραχμή = drachma (derived from a word for *seize / grasp,* Onions 1966) illustrate the presence of the affricate in the Indo-European languages. The phenomenon in English often involves systematic onomatopoeia, but as stated by Hock, 'Vocabulary of this sort is notoriously difficult to deal with,' (1991: 177), and one cannot assume that systematic onomatopoeia was the only factor involved. Nevertheless, words such as SE: gar <**dr**ore.rer> = *leenny* (penis) *erect* (*Wordlist*: 130); NW: gar <**dr**oe.thin.ner> = *hang with rope*, and -: sn <**tr**ōgŭrlīgŭrdīck> = *hang as a culprit* (p.247) suggest that onomatopoeia was a factor in the formation of Palawa words, particularly when those words are post-settlement formations. Attention has been drawn to Woiwurrung /**dr**angbulabil/ = *gun / musket / gun,* and Diyari /nan**drr**a-rna/ = *to hit* earlier in this subsection. What appears to be a similar phenomenon has been observed in Diyari in which the change in articulation is contrastive (*Macquarie*: 127):

> The letter 'd' is always followed by a rolled 'rr', sounding something like the Scottish pronunciation of the beginning of 'dram'. As well Diyari has ...a short flap 'rr' (pronounced very quickly), like the 'd' in the middle of Australian English words – Diyari 'kirri' sounds like English 'kiddy' ... The difference between the "r's" is important for meaning. ...

As already noted in passing, transcriptions of <**dr**> do not appear to have been recognised by Australian linguists as a single segment. Thus Blake in his phonotactical description of Woiwurrung (1991: 63-64) does not comment on the transcription of <**dr**>, <**tr**>, <**du**V>, <**tw**> and <**ti**V> as intial segments in Woiwurrung words. Nor does he compare them with <**t/d**>, <**dj/tj**> and <**th/dh**> as stops. He would appear to have assumed that <**dr**> and <**tr**> transcribed consonant clusters, and that similarly <**du**V>, <**tw**> and <**ti**V> were couplets of different segments. An investigation of the orthographical sequence on the assumption that it transcribes a single segment, and of the single segment as a phoneme, necessarily is initially teleological, and accordingly it could be argued that any inferences drawn are subjective and impressionistic. What must be kept in mind, though, is the fact that the nineteenth-century Palawa words preserve words formed up to 37 millennia ago. The incorporation of [**d**$^{\mathbf{r}}$] in an utterance may well have been contrastive at the time the word was first formed. Devoicing, and in the case of [**r**] in word-initial position, dissimilation may evidence bleaching; but in many words the devoiced and/or lenited segments retained their contrastive function. The words listed in Table 7.6.2.1 suggest systematic onomatapoeia (cf. Hock 1991: 177-179). In the contexts defined by the metaphysical concepts embodied in those words, they are

ambiguous. They are consistent with a surmise that words with voiced post-alveolar affricates were at times contrastive with comparable words with <**tr**>, <**t/d**> and <**r**> in initial position, and also with a surmise that as a result of bleaching the apico-alveolar stops and rhotics were as phonological progressions often also allophones. With these caveats in mind, it is suggested that most of the following words support the interpretation of [d^r] as a phoneme. SE: gar <**drore.rer**> = *leenny* (penis) *erect* (cf. the words with transcriptions of <**l**> in initial position, *Wordlist*: 129-130); W/NW: mj <**dyekka nameenera**> = *growl* (cf. in particular the words for *sulky* and *cranky* as well as the words with <**l**> in initial position, Table 7.6.2.1(a)); SE: fr <**kindrega**> = *beat* (cf the words with transcriptions of <**l**> and <**r**> in initial position, *Wordlist*: 253-254): E: mj <**relbooee trawmea**> = *to flay* (a doubly reduplicated word) (cf. SE: mj <**lergara leawarina**> = *to flay, Wordlist*: 206, also a doubly reduplicated word); NW: gar <**droe.thin.ner**> = *hang with rope* (a doubly reduplicated word *Wordlist*: 247) (Cf. –: sn <**tărnŭr**> = *kill / break* and the words with transcriptions of <**l**> in initial position - pp.277-278); E: jj <**truwalla**> = *mountain* (cf. the words for *hill* with transcriptions of <**l**>, <**m**> and <**n**> in word-initial position *Wordlist*: 251-253).

§ 7.6.4.4 Other Fricatives

Most relevant comments with respect to transcriptions of fricatives have already been made in discussing other segments. It is clear that the rather rare transcriptions which ostensibly record alveolar and palato-alveolar fricatives were aspirated articulations of other more commonly articulated segments, and as such allophones of these other segments. The single consonants and consonant clusters transcribed were <**ts**>, <**ks**>, <**s**>, <**st**>, <**x**>, <**z**> and <**zz**>. Only one place name, viz Milligan's *Terelbesse* (Swan Island), has been identified. All ordinary words in which these transcriptions are incorporated have been listed in Table 7.6.4.4. In this table, bolding indicates the relevant segments. Words which incorporate transcriptions of the fricatives discussed in this subsection have been placed in the left hand column, and apparent cognates in the right hand column.

Table 7.6.4.4

SE: fr	cuguénix lomi	*vous partez*	cf.	-: sn	cānghĕnnĕ	*go back*
E: cr	teat.**tch**er	*crab*		SE: gar	tude.**dy**	*sand crab*
E: cr	we.li**tch**.**tch**er	*doe kangaroo*		E: gar	woo.le**t.y**er	*female brush*
E: cr	we.li**tch**.**th**er	*female kangaroo*				
SE: cr	why.li**tch**.**tch**er	*parrakeet*		E: mj	welleetya	*swift parakeet*
E:gar	ba**tch**.er	*old man*		E: gar	pa**t.y**er	*old man*
SE: cr	whue.ler.pute.**tch**er	*punk* (fungus)		E: gar	wool.ler.ker.pi**t.y**er noityer	*fungus on gum*
				E: mj	wullugbe**t**ye	*punk*
E: gar	ty.en.bri**tch**.er	*'plant C'*				

Table 7.6.4.4 continues

SE: cr	li.no.**tch**er	*salt water*
-: jj	mo**ch**a carly	*salt water*
-: lh	pitse**r**ata	*ear*
N/NW: jj	co**ch**a	*swan*
E: jj	cu**ch**ana hudawinna	*little boy*
E: jj	cu**ch**anahu	*little girl*
E: mj	lowama**ch**ana	*circle*
E: gar	rite.**ch**er	*devil* (Satan)
E: mj	ne**ach**a puggaroamee	*to dream*
-: sn	**ch**éllár	*pain*
E: mj	kawaloo**ch**ta	*conflagration*
E: jj	la**ch**ranala	*large island*
E: bd	**ch**amnotca	*sheep*
E: mj	tea**ch**rymena	*catarrh*
W/NW: mj	tea**ch**reena	*catarrh*
SE: mj	pa**ch**areah	*shooting star*
SE: gar	tuks.er.nuks.er	*come*
SE: gar	tuz.er.vuz.er	*come*
SE: fr	maza	*donner*
N:cr	ta.ne.pare.ye.ar.zone	*give me one*
NE: gar	gozee	*make haste*
SE: mj	lazza kah	*brush kangaroo*
SE: fr	muguiz	*nez*
-: lh	zitina	*hair*
SE:mj	lazz'leah	*pelican*

E: gar	ly.note.yer	*sea*
E: mj	lyaleetea	*sea*
-: sn	mōkênûr trārwêrlâr	*water salt / sea*
E: jj	pulverata	*ear*
N: jj	cooha	*swan*
W: gar	koedekar	*swan*
E: jj	cuckana hudawinna	*little boy*
E: gar	cuckana ludineny	*little girl*
E: gar	kee.ten.ner	*little one / small*
E: gar	rut.yer	*satan*
E: gar	nare.er.kun.ner	*to dream*
-: jj	cooroo	*exclamation*
E: mj	kawurrinna	*fire in bush grass*
E: jj	laibrenala	*large island*
E: gar	tem.tor.yer	*sheep*
SE: mj	tekalieny	*catarrh*
E: mj	tachareetya	*cough*
E: mj	puggareetya	*shooting star*
SE: gar	tuthervuther	*come*
SE: fr	mava	*donnez*
N:cr	tar.ne.pare.ye.ar.bo.nu	*give me one*
W: cr	lartheker	*kangaroose*
SE: ck	muidje	*nose*
-: bk	kÿthinna	*hair*
NW:jj	larth.bar	*pelican*
W: gar	lar.dip.bar	*pelican*

§ 7.6.5 Transcriptions of <h>

Transcriptions of <**h**> occur in a number of contexts. This raises the possibility that glottal [**h**] as a segment familiar to those recorders who were English speakers was identified and/or transcribed at times when a philologist would have disavowed such an articulation, and interpreted the sound heard merely as a hiatus, or as a different segment. With the exception of SE: fr <**h**ouana> = *les bras*, the fact that none of the French speakers transcribed <**h**> in any of the words recorded by them, provides a caveat against any general acceptance of [**h**] as a Palawa segment unless otherwise corroborated. The salient point is that not only the French explorers, but also Gaimard, were exceptionally well- educated men (§§ 6.1.2 & 6.1.10). Some of them would have recognised the English glottal had it been articulated in their presence, and it is unlikely that they would not have identified [**h**], [**ɣ**] and [**χ**] had these segments been articulated within their hearing. The fourteen apparent cognates for *testicles / scrotum* grouped under <mada> (*Wordlist*: 129-130) are a case in point. George Augustus Robinson, Milligan and Brown transcribed six words with <**tt**>, ostensibly indicating the articulation of unvoiced geminate consonants. In six apparent cognates the French transcribe <**d**> in lieu, ostensibly evidencing accenting which was perhaps a consequence of the

degemination of the stops. Only Robinson recorded <**muth.her**> and <**muth.er**>, presumably as voiced laminal-dental stops. Yet the difference in the pronunciation of a slightly aspirated geminate alveolar stop and a slightly aspirated lamino-dental is small. If the various sounds identified were differently articulated, but allophones of each other (§ 7.6.3.6), a further complication is added to the interpretation of the transcriptions. The examples provided in Table 7.6.5(a) suggest, firstly, that there was a considerable variation in the articulation of the dorso-velar nasal and its lenited forms; and, secondly, that the sounds heard were differently identified by French speakers on the one hand, and by English speakers on the other. The caveat to be sounded, is that a number of the purported identifications may be misleading in some respect, but it is almost impossible to state which were the most reliable. In the table, bolding indicates the relevant segments in a word, and underlining the second arm in a doubly reduplicated word.

Table 7.6.5(a)

E: mj	wiggetena	*moon*	cf.	E: bd	weig.**tha**	*moon*
Table 7.6.5(a) continues							
E: jj	weedina	*moon*		E: bdm	wug**tha**	*moon*
E: cr	we.tar	*moon*		E: rb	wee**thae**	*moon*
SE: gar	vée.tée	*moon*		W: sc	wee-etta	*moon*
E: gar	ly.note.yer	*sea*	cf.	E: cr	li.no.**tcher**	*salt water*
E: mj	lia noattyé	*salt water*				
E: gar	line.ner.wote.yer	*salt water*				
E: mj	lialeetea	*sea*				
N: gar	lo**ng**.e.ner	*foot*	cf.	E: mj	tu**gh**analoumeno	*track* (footmark)
N: gar	lee.**i**.ner	*foot*		W/NW: mj	lu**gh**	*foot*
N: gm	do**g**na	*pied*		SE: mj	lu**g**ga umené	*instep*
SE: fr	la**i**doga	*heel*		E: mj	lu**g**yenna	*sole of foot*
SE: fr	la**ï**doga	*talon*		E: mj	lug - **y**enna	*sole of foot*
-: wb	tūkkĕhkūllă	*thigh*	cf.	SE: mj	tu**gh**rah	*thigh*
N: gm	de**g**agla	*cuisse*				
SE: mj	para**n**gana	*shoulder*	cf.	SE: mj	para**n**ghé	*shoulder*
SE: fr	ba**g**uy	*épaules*		SE: gar	prăr**nh**ĕ	*shoulder*

Milligan, George Augustus Robinson, and Sterling not infrequently transcribed orthographic sequences in the forms <**ngh**> and <**nghV**>. A number of words which include transcriptions in these forms are apparent cognates of words in the form <**ngV**>, and in these cases it is usually clear that the transcriptions straddle syllabic boundaries. Examples are provided in Table 7.6.5(b). Nevertheless, there are some transcriptions of <**ngh**> in word-final position, and a few transcriptions in which the segments constitute a cluster at either the beginning of a

word, or at the end of an internal word element. Examples include SE: mj <**'ngh**ay rumna> = *black cockatoo*; W/NW: mj <pay**ngh**> = *Larus pacificus*; and W/NW: mj <mungyang**h**garrah> = *white*. In contrast, and perhaps significantly, only one Charles Robinson word of this type has been identified, viz W: cr <lope.lig.**ing.h**oop> = *smoke*. A number of Charles Robinson words which incorporate <**ng**> in final position have Milligan, George Augustus Robinson, and/or Sterling apparent cognates which incorporate <**ngh**> and <**ngh**V>. The relatively large number of inscriptions in the form <**ngh**> suggests that a glottal was identified. The surmise is strengthened by Sterling transcriptions such as -: sn <tōang'**h**ĭnnēe> = *put on*, and -: sn <trōa**ng'h**ĕnĕr> = *nice / palatable* both of which incorporate an apostrophe, and thus plausibly indicate a closure interpreted as a pause and/or aspiration (§ 7.3.2). In the table, bolding indicates the segments to be compared, and (**ø**) indicate the loss of a relevant segment.

Table 7.6.5(b)

E: mj	me — ingha**n**a	*back*	cf.	E: gar	mee**nn**ener	*backbone of kangaroo*
				E: cr	mea.ing.(**ø**)er	*back*
				E: cr	meang.(**ø**)en.ner	*backbone*
E:mj	munnaghana	*ankle*		E: mj	mengha	*ankle*
E: mj	nienna langhta	*fat woman*	cf.	E: mj	loa maggalangta	*deep water*
E: mj	teebra poynghta	*vagina*	cf.	SE: mj	teebra poyngta	*vagina*
E: mj	ongheewammena	*ask*		SE: mj	oghnamileé	*ask*
E: mj	neingheta	*face*				
-: sn	nōonghĕnăr	*forehead*	cf.	NE: cr	noing.gi	*forehead*

The other major context in which transcriptions of [**h**] were recorded involved the lenition of [**k/g**], usually in word-initial position, but at times as the initial segment in following word elements. The words for *hand* sublisted under <**h**an.ner.me.kar.len.ner> (*Wordlist*: 85) provide a good range of examples. The same caveat must be kept in mind in considering other potential examples, viz the possibility that the transcriptions may have recorded [γ] and/or [χ] and/or some other indistinctly articulated fricative. However, there are no transcriptions of apparent cognates with either <**gh**> or <**ch**> in word-initial position. Accordingly, Milligan's claim that he identified these fricatives (§ 7.5.1.1), and his lack of identification of the segments in place names, militates against the articulation of [γ] and/or [χ] in word-initial position. There is one Robinson place name, viz ***Gh**o.neem.men.ne* (Barnes Bay, in *Place Names*: 9) in which <**gh**> on comparison with other names for similar water features in the southern Tasmania, presents as an aspirated dorso-velar stop. As noted, there is only one French transcription of <**h**>, viz SE: fr <**h**ouana> = *les bras* (*Wordlist*: 83). Most of the other French and English words for *arm* listed under subheadings <gan.ne.min.er>, <houana>, <wee.ter> and <wer.ner> (*Wordlist*: 83-84) suggest phonological progressions in the forms

[**k/g**] > [**h**] > [**ø**]; and [**k/g**] > [**k^{w}**] > [**w**]. Progressions from [**k/g**] > [**h**] are common cross linguistically. In what is not an exhaustive list, one or both of the progressions can be viewed in *Wordlist* in the words listed under *HAND* (p.85); *BOY* (p.174); *COME* (p.189); (to) *LIE* (p.285); *KANGAROO* (pp.298-299); and *SNOW* (p.399). Hypothetically, one would expect to find numerous examples of similar progressions in which the first step involved a pronunciation shift from [**ŋ**] to [**k/g**], but there is very little evidence for this. In a large number of words for *FIRE* sublisted under <'ngune> (*Wordlist*: 224-225), only -: gar <**que**e.ong> provides an example. Other ostensible examples can be viewed under <nune.ner> and <quare.re.ting.en.ner> *sandy beach / sand / sable* (p.139) and <gon.nan.ner> and <nay.de.ker> *emu* (p.157), but the labiovelarised words excepted, there is a caveat, viz that the transcriptions may record an indistinctly articulated dorso-velar nasal. The decay of [**ŋ**] in word-initial position, as well as in other positions is more usually evidenced by a progression from [**ŋ**] > [**n**] and/or > [**ø**].

§ 7.6.6 Geminate Consonants

Both the French and English recorders ostensibly recorded geminate consonants in a very large number of words. The Robinson transcriptions straddle syllabic boundaries, and comparative analysis leaves it clear that the geminate consonants transcribed by those recorders who did not mark syllabic boundaries also straddle syllabic boundaries. The one group of recorders who did not transcribe geminate consonants was the French explorers. Gaimard, the other French recorder, transcribed doubled consonants in eight words, all reproduced in Table 7.6.6. However only <pa**mm**ere> ostensibly records a set of geminate consonants. It will be suggested below that the table is instructive in a number of respects, and warrants a slight diversion before proceeding with the subject of geminate consonates. In the table, bolding indicates the relevant segments, and (**ø**) indicates the loss of a relevant segment.

Table 7.6.6

NE: gm trenn houtne	*corbeau*	cf.	-: sn	tri'(**ø**)ūnyār	*crow*
NE: gm gann henen henen	*epervier*	cf.	E: jj	engan(**ø**)ama	*eaglehawk*
			-: lh	ingen(**ø**)ana	*hawk*
NE: gm nenn here	*dormir*	cf.	W/NW: mj	nunabeah temaruleeto	*very sound sleep*
			SE: mj	nueenédy	*drowsy*
NE: gm renn hatara	*ciel*	cf.	NW: gar	drone.ner	*sky, blue sky*
			-: sn	tōorēen□r	*sky*
NE: gm pin(**ø**)ounn	*poisson*	cf.	NE: gm	pin(**ø**)ougna	*merlan*
			-: jj	pen(**ø**)unina	*fish*
			-: jj	penungana	*fish*
NE: gm lenn parena	*pierre*	cf.	E: gar	loi.(**ø**)in.ner	*rock*
			SE: gar	lōin.yĕ	*rock*

Table 7.6.6 continues

			E: gar	lone.ner	*rock*
NE: gm pammere	*rm*	cf.	E: gar	pār.mĕ.rĕe	*one*
			-: jj	parmery	*one*
SE: mj nueenėdy	*drowsy*				

It will be noted that in the first group of words the transcription of <**nn**> in the Gaimard words suggests that the purpose of the transcription was to indicate heavy accenting. Charles Robinson used the same approach when he transcribed <**ll**> in final position (§ 7.6.2.2). It will also be noted that the second 'word' in this group is headed by <**h**>. It is suggested that in each case the extra 'word(s)' constitute the second and third elements of a single word that typically comprised three word elements. (In the case of <ga**nn** henen henen> the word has been doubly reduplicated). In other words, Gaimard identified a hiatus in the articulation of the word. That hiatus was a product of the accenting of the final segment in the first word element (§ 7.6.5), and similar to the transcription of <**h**> by Milligan after <**ng**> in many words (§§ 7.5.1.1 & 7.6.5), and of an <**e**> by the Robinsons in word elements transcribed in the form CVCe (§ 7.3.1). The <**h**> precedes a vowel exposed by eclipsis (§ 7.6.8). The surmises are supported by the transcriptions of the apparent cognates in the second column. In the first three words, the exposed vowel has been bolded. In the other four words the lost segment was replaced by epenthetic alliteration, and the epenthetic segment has been bolded.

In the second group, the bolded segments in <pinou**g**na> suggest that Gaimard identified a dorso-velar nasal, as did Jorgenson in <penu**ng**ana>. In Palawa the preservation of a dorso-velar nasal in final position by itself evidences the stressing of a word element, and/or the accenting of the nasal (§ 7.9). The words thus indirectly support the interpretation placed on <**nn**> in <pinou**nn**> and the other like Gaimard words in Table 7.6.6. The <**nn**> evidences the lenition of the dorso-velar nasal preserved in <pinou**g**na> and <penu**ng**ana> (§ 7.6.8.1). The accenting has been preserved notwithstanding the shift of the dorso-velar nasal to an alveolar nasal.

The matters so far referred to, coupled with the absence of any transcriptions by the other French recorders to record geminate consonants suggests that the ostensible recording of geminate consonants by the English recorders may reflect mistaken identifications by the English of the sounds they heard. Albeit weakly, the suggestion is supported by the Palawa words for *scrotum* and *testicles* sublisted under <mada> (*Wordlist*: 129-130) and reproduced in Table 7.6.3.3(a). In these words the French record <**d**> as a segment that straddles the boundary between the first and second word elements. Robinson's transcription of <mu**th**.her> points to heavy accenting followed by a hiatus. The other transcriptions,

including one by Robinson, ostensibly transcribe geminate consonants, but arguably could indicate an identification of the hiatus as a repetition of the alveolar stop. Milligan's statement that the first segment 'carried the accent' (1890: 13; § 7.5.1.1) is apposite. Nevertheless, there is convincing evidence that geminate consonants were in fact articulated.

Gaimard's <pa**mm**ere> in the second group evidences anticipatory assimilation. The first **<m>** replaced the rhotic preserved in <pā**r**.mĕ.rĕe> and <pa**r**mery>. It is thus difficult to argue that Gaimard's <pa**mm**ere> does not evidence the articulation of geminate consonants.

Strong evidence is also provided by Robinson's <dro**ne.n**er> and <lo**ne.n**er>. In each case the **<e>** in the first element evidences heavy accenting of the alveolar nasal in final position, and also evidences a hiatus. The hiatus was followed by the same nasal. Along the same lines *Mote.ter.moon.ner.mar.re.ner*, a name for both the Ringarooma River and the Great Forester River (*Place Names*: 39), can be compared with <mo**r**.ter.moon.ner> as a North Eastern speech word for *river* (*Wordlist*: 372). Again, it is difficult to argue that the words do not evidence the articulation of geminate consonants.

A subsidiary argument to similar effect stems from transcriptions in the forms **<w.w>** and **<n.n>**. In NW: gar <dro**w.w**er.rid.de.yer> = nose (*Wordlist*: 104) **<w>** evidences the articulation of a bilabial semi-vowel. Its earlier form is evidenced by <tra**r.w**er.er.kike> and <tro**u.w**er.rid.ic>. Whether the pronunciation shift evidences the lenition of **[r]** (§ 7.6.2.1.3), or anticipatory assimilation, it is unlikely that it was accented. If it was not accented, then the articulation of geminate consonants is indicated. Similar arguments can be developed in connection with transcriptions of **<n.n>**. Compare on the same page N: gar <mu**n.n**er> and apparent cognates, with E: gar <meen.ner> and apparent cognates.

To sum up the ostensible transcription of geminate consonants will often be ambiguous in terms of the segment or segments articulated. The interpretation of such words becomes even more uncertain, when it is accepted that there can be no certainty that a word in one language group provides a reliable guide to the articulation of a cognate in another language group.

As a final point, the plethora of different articulations recorded neither persuasively evidences carelessness on the part of the European recorders, nor necessarily Milligan's 'carelessness and laxity of articulation ...' on the part of the informants (1890: 9-10). The words come from the lexicons of a number of language groups. The same fact also explains other differences in the words, such as possible alternations between **<tr>**, **<t>** and **<r>** in word-initial position (§ 7.6.4.3).

§ 7.6.7 Palatalisation and Labiovelarization

In this thesis the term 'palatalisation' will be used as a reference to the partial assimilation of a consonant to a neighbouring front vocalic segment (Hock 1991: 73). Phonologically, the assimilation manifests itself as a non-segmental [j] like glide. Following Hock, the phonological representation of a palatalised consonant will be shown by a superscript '^{y}'. The term 'labiovelarization' will be used as a reference to the partial assimilation of a consonant to a neighbouring back and rounded vocalic segment (Hock 1991: 73). Phonologically the assimilation manifests itself as a non-segmental [w] like glide. Again following Hock, the transcription of a labiovelarized consonant will be shown by a superscript '^{w}'.

§ 7.6.7.1 Palatalisation

The palatalisation of consonants was recognised and briefly discussed by Schmidt (1952: p.108). For him the term included labiovelarization as a linguistic phenomenon. Crowley and Dixon do not discuss either palatalisation or labiovelarization except to the extent that in their discussion of <**ly**> as a transcription they recognise the possibility that it evidenced the articulation of a lamino-palatal lateral (1981: § 2.2). In terms of their discussion of consonants more generally, they would not appear to have been conscious of the presence of the phenomenon. Thus in discussing the evidence for the presence of lamino-palatal stops, they refer simultaneously to transcriptions of <**ty**> and <**tch**>, but make no reference to the possibility that transcriptions of C**y** and C**V**V might evidence palatalisation. The palatalised consonants identified by Schmidt (1952: 108) were [**t**^{y}] and [**n**^{y}] in all language groups; [**l**^{y}] in Eastern and (south) Eastern speech; and confined to Eastern speech [**m**^{y}], [**r**^{y}], [**g**^{y}] and [**p**^{y}]. However, materials not available to him now provide evidence of palatalisation and labiovelarization in all the forms referred to by him in all the language groups, and in the case of stops, both as voiced and unvoiced segments. Inasmuch as he does not discuss forms other than <**te**> and <**ne**>, it seems likely that he did not recognise the possibility that in appropriate contexts syllables in the form **CV**V might evidence palatalisation. See, for instance, his comments on vowels (1952: 131-137)

Transcriptions of C**y** are common in the Palawa lexicons. Milligan's description of <**y**> as a sound implied that the segment transcribed was [j] (§ 7.5.1.1). Robinson transcriptions are often marked with a diacritic '‿', suggesting a clipped articulation (§ 7.3.3). There is no evidence that any of the transcriptions of <**y**> by the European recorders record the diphthong [**ai**] and the like, as articulated in English ***my*** (§ 7.7.2). Very typically, the use of dots as diacritics by the Robinsons, Cunningham, and others, evidences the fact that many utterances

in the form Cy were word elements in themselves and/or morphemes. The segments transcribed in CyV(C) and CVV(C) can have different geneses (§ 7.8.2); but plausibly many word elements transcribed in the form CVV(C) mask the articulation of a palatised segment. The transcriptions of Cy include <**ry**>, <**ly**>, <**py/by**>, <**my**>, <**ny**>, and <**ty/dy**>. In terms of frequency there are thus a large number of transcriptions that can be interpreted as palatalised alveolar stops and lamino-palatal nasals; palatalised laterals are less common; and palatised bilabials and rhotics are uncommon. Cross-linguistically most of these segments are also uncommon (Hock 1991: 136 & 133). That many of the transcriptions record palatalised segments is supported by the fact that only six transcriptions of <**ly**> are followed by a back vowel, one such transcription of <**my**>, six of <**ny**>, none of <**py**>, one of <**by**>, and very significantly it is suggested, none of <**ty/dy**>. Arguably, a number of the transcriptions evidence the articulation of [t^y/d^y] as pronunciation shifts from, and allophones of [d^r] (§ 7.6.3.5). But [t^y/d^y] as a segment, whatever its progenitor, was probably a form of palatalisation. Examples are provided in the following table. In this table, bolding indicates the relevant segments. Words which incorporate transcriptions of Cy have been placed in the left hand column, and apparent cognates in which a vowel appears in lieu of <**y**> in the right hand column.

Table 7.6.7.1

E: mj	tyackanoyack	*respire*	cf.	E: gar	**tea**ngonyack	*respiration / sigh*
E: gar	**ty**.er.nar	*faeces*	cf.	E: mj	**tia**mena	*dung / excrement*
E: mj	poyena potat**ty**ack	*vanish*				
E: mj	wa**ly**a noat**ty**é	*musk parrot*	cf.	E: gar	lue.er.tine.ner.wit.**yer**	*cockatoo*
N: cr	**by**.**ny**.**ly**.a.mul.de.rop.per	*I will see you*				
E: mj	leoo**ny**ana	*left leg*	cf.	-: lh	lata**na**ma	*leg*
E: mj	come**na**—ra**ny**ah	*beardless*	cf.	E: mj	come**na** pure**n**nah	*beard*
N: gar	**py**.at.er.lare	*three*	cf.	N: cr	**pie**.nare.re.pare	*three*
E:sc	**ry**tia	*white man*	cf.	E: mj	**ria**nna	*white man*

§ 7.6.7.2 Labiovelarization

Phonological progressions in the articulation of word-intial segments from [**k**/**g**] > [k^w/g^w] > [**w**] > [**r**] > [**l**] were discussed in §§ 7.5.1.2, 7.6.2.3 and 7.6.3.1, and similar progressions starting with [**p**/**b**] in § 7.6.3.2. Transcriptions of labiovelarized consonants would appear to have been limited to dorso-velar nasals, dorso-velar stops, and bilabial stops. As dorso-velar nasals and dorso-velar stops, the segments were typically recorded in the forms **ngu**V, **ngw**V, **gu**V, **gw**V, **ku**V, **kw**V and **qu**V. But comparative analysis of transcriptions in the forms **kr**V, **kl**V, **gr**V and **gl**V in many words suggest that what are ostensibly consonant clusters more probably evidence dissimilated labiovelarized dorso-velar stops. The succeeding vowels in

these clusters include a large number of front vowels as well as back vowels, the former a phenomenon which may have followed dissimilation of labiovelarized dorso-velar nasals and stops into [**k/g**] and [**w**] respectively. Table 7.6.7.2 provides examples. In a few words only the transcriptions may evidence eclipsis of the vowel before a rhotic in a following word element, followed by a pronunciation shift in the articulation of the rhotic. As an example compare SE: mj <rebkarranah> = *bite* with E: mj <ralkwomma> = *bite*. Table 7.6.3.2 provided examples of the labiovelarization of bilabial stops. Table 7.6.7.2 provides examples of the labiovelarization of dorso-velar nasals and stops. Bolding indicates the relevant segments. The underlining of word elements indicates the second arm in a doubly reduplicated word.

Table 7.6.7.2

SE: fr	mon**gui**	*nez*	cf.	SE: fr	mu**gui**	*nez*
SE: fr	con**guin**é	*barbe*	cf.	SE: fr	co**guin**é	*barbe*
				SE: fr	co**quin**é	*barbe*
				SE: mj	cowinné	*beard*
				SE: mj	cowintimy	*beardless*
SE: fr	mon**gui**	*bouche*	cf.	SE: fr	mo**gui**	*bouche*
				SE: gar	mō.gēe	*mouth*
SE: mj	poieté lon**gw**innе	*hair*	cf.	SE: fr	logo<u>lou</u>ïné	*cheveux*
				SE: fr	cililogení	*cheveux*
E: mj	kokoleeny <u>**kongua**</u>	*demur / grumble*				
SE: fr	**qu**angloa	*voulez vous venir*	cf.	SE: fr	**c**anglonao	*will you come?*
W: gar	**quoi**.ber	*badger / wombat*	cf.	W: gar	**k**oy.ber	*badger*

§ 7.6.8 Eclipsis and Epenthesis

Eclipsis and epenthesis are well evidenced cross-linguistically (Hock 1991: 117). In this thesis the phenomena have already been, and will again be referred to relatively frequently, as plausible, and at times obvious explanations of the variations to be observed in the transcriptions of apparent cognates. A very comprehensive selection of examples involving words and names for streams will be provided in Table 7.6.8.2.

The eclipsis of vowels as segments was almost invariably the product of the stressing patterns to be described in § 7.9. With only one identified exception, Palawa word elements always retained one or more vowels in medial position. *Lair.**brn**.hurn.me* is the name of the clan which occupied the upper reaches of the *Huon River* (Plomley 1992: clan 30), and its second element may merely evidence an error in its transcription. The loss of the medial vowel in word elements only occurred when, as a result of the earlier loss of a consonant or semi-vowel as a final segment, the vowel was exposed as the final segment for the time being.

Even then the loss unless otherwise explicable, was almost invariably confined to those cases where two word elements had fused, a phenomenon usually associated with the contraction of the first arm of a doubly reduplicated word. The subject will be revisited in § 7.6.8.2.

The eclipsis of segments in word-initial position was very rare; and usually a product of lenition (§ 7.6.5). Very typically it left a vowel exposed as the segment in word-initial position. The total loss of the first element in a word was very uncommon, but often clearly evidenced. Compare *Lamabbbele* as a name for Southport as a relatively small and semi-enclosed harbour in southern Tasmania (*Place Names*: 17), and *Mebberlek* and following (pp.35-36) as names for Macquarie Harbour, Port Davey, and features associated with these much larger water features, and *Neeth.par* and similar names for the tidal inlets south of Circular Head in north western Tasmania, and *Nib.ber.lin* as a name for the Derwent River, in fact originally its estuary (pp.45-46). It is believed that the total loss of the first element in these names involved a loss of its semantic relevance, as a result was a product of semantic change, and as such a subject beyond the scope of this thesis. By way of contrast, the eclipsis of the initial segments in following word elements was common. It is clear that the eclipsis and epenthesis of these segments were the products of the stressing of a preceding word element, and in consequence the under stressing of the following word element. This was coupled at times with the interaction of stressing with the accenting and/or lenition of segments in both initial and final position in word elements. This subject will be revisited in § 7.9 where the conditioning influences of stressing and accenting will be discussed. In the meantime it is appropriate to define the circumstances in which eclipsis and epenthesis affected the formation of consonant clusters, and in other cases influenced cluster simplification.

§ 7.6.8.1 Consonant Clusters in Final Position

A large number of word elements in initial position were recorded in the form CVCC. In a number of these elements the consonant cluster transcribed is <**rng**>. Numerous transcriptions of consonant clusters in the forms <**rn/rm**>, <**wn**>, and <**un**> suggest that the progenitor in each case was either a consonant cluster originally articulated as /**rŋ**/, or a similarly articulated retroflexed dorso-velar nasal (§ 7.6.2.4). The differing transcriptions are thus explicable in terms of a retroflexed dorso-velar nasal, which as a result of dissimilation later became a consonant cluster (§ 7.6.2.4). The surmise is strengthened by some associated matters. Plausibly, retroflexes are a product of stressing and accenting (§ 7.6.2.4), and there are no word elements in the Palawa lexicons which are inconsistent with such a surmise. With very few exceptions, all transcriptions of CV**rŋ** are word elements in initial position. Clusters

in the form <rn>, <wn>, and <un> regularly appear in initial word elements, and are extremely rare in following word elements. Word elements in initial position were almost invariably stressed in Palawa (§ 7.9). Arguably, therefore, clusters in the form <rn>, <wn>, and <un> evidence the former articulation of a retroflexed dorso-velar nasal which after dissimilation and loss of accenting lenited to [r˞] + [n] and [ř] + [n]. The possibility that the retroflexed segment was an alveolar nasal can't be ruled out. Part A of Table 7.6.8.1 provides examples. It is emphasised that the Palawa lexicons are replete with such examples, and as well as with word elements in the forms CVC and CV which as a result of comparative analysis are likely to have been contracted forms of word elements originally in the forms CVrŋ and CVrn (see below). Part B provides examples of words in which, due to a lack of stressing, the final word element has been preserved in a severely atrophied form. Part C compares words which incorporate reflexes of rhotics with words which incorporate reflexes of the dorso-velar nasal. To facilitate overall lexemic and phonological comparisons, many examples provided in the thesis have been culled from the well-recorded words for *hand*. Part D provides examples in the context of the matters discussed in this subsection.

As noted, because the first word element was usually stressed (§ 7.9), the full preservation of elements in the forms CVrŋ and CVrn was almost-always confined to word elements in initial position. A number of examples, including other examples which exhibit lenition, can be viewed in the words for *WOMAN* listed under <lag.gen.er>, <loe.clue.way>; <lolna>; <loon.ner>, <lorl.per.min.er>; <lor.ner> and <low.an.ner> (*Wordlist*: 471-472). Other words which fully preserve lexemes in this form (and as well atrophied forms of the lexeme) are listed under words for *FOOTMARK* (p.96); *BLACKEN* (p.165); *CHIEF* (p.181); *LARGE* (p.281); *wallaby* (p.299); *ROAD* (p.373}; *ROAST* (p.374); and *STONE* (p.412). A large number of place names also preserve lexemes in this form. See Table 7.6.8.2 for examples. Consonant clusters as in other languages (Hock 1991:.88-89), were followed by cluster simplification and cluster degemination. This accounts for the loss of the rhotic in some lexemes, the loss of the nasal in others, and not infrequently the loss of both segments. Recognition of the original form of the word element facilitates identification of reflexes of both the rhotic and the nasal in final position, and their porting into initial position in following word elements as a result of eclipsis followed by epenthetic alliteration.

All Palawa word elements in the forms CVC and CV are consistent with two associated hypotheses. Firstly, the progenitor of many word elements in both initial position, and as following word elements, was very arguably an element in the form CVrŋ. Their nineteenth-century forms evidence cluster simplification which was followed by the eclipsis of one or both consonants, and in many following word elements replacement of the former initial

segment by epenthetic alliteration. Secondly, the consonants when preserved are either a rhotic, or one of its allophones including lenited forms; or on a dorso-velar nasal, or one of its lenited forms. Allophones and lenited forms of the rhotic include [**w**], [**u**], [**l**], [**t/d**], [**j**], and short front vowels. Lenited forms of the nasal include [**n**], [**m**], [**k/g**], [**h**] and [**j**]. Particularly telling are the extremely numerous transcriptions of apparently cognate word elements in which <**r**> and <**n**> as both final and as initial segments alternate. Transcriptions of <**k/g**> as the final and initial segment in word elements are also very common and, whilst less common, <**m**> and <**t/d**> are not uncommon, and similarly explicable. It is not being suggested that all word elements in proto Australian were in the form CV**rŋ**, but the hypothesis discussed in this subsection satisfactorily explains the derivation of a huge preponderance of the ostensibly more fully preserved words in the Palawa lexicons. Part B of Table 7.6.8.1 and Table 7.6.8.2 provide examples of the various points made. It will be noted that the examples in Table 7.6.8.1 include couplets of apparent cognates in which the geminate consonants are rhotics in one member of the couplet, and alveoar nasals or dorso-velar stops in other couplets.

In Mara, but not in Nara, words rarely ended with a consonant. In consequence lenition to <**n**> was not infrequently extended by anaptyxis. In Robinson and Sterling words, the transcriptions include both <**er**> (indicating schwa - § 7.8.3), <**a**>, and very rarely <**ar**> (indicating more extended anaptyxis, (see § 7.6.2.1.3). In Milligan words, the transcriptions generally include <**a**> (probably indicating schwa) and <**é**> indicating a degree of stressing or accenting (§§ 7.5.1.2 and 7.9). The Jorgenson transcriptions are more variable. Transcriptions of <**i**>, <**e**>, <**ny**> as well as <**a**> are frequent. Whilst <**ny**> may evidence palatalisation of the nasal, <**y**> and <**ya**> plausibly a number of transcriptions evidence vowels with less than one mora, or forms of schwa. Part B of Table 7.6.8.1 provides Palawa examples of the points raised. The propositions advanced provide plausible and internally consistent explanations of linguistic phenomena referred to in this and other subsections. An understanding of the phonological progressions involved is fundamental to an understanding of the form and pronunciation of a very large number of Palawa words, as well as the development of the Palawa languages and their lexicons from the time Tasmania was first discovered and occupied by Aborigines. A complete exposition of the phenomena and progressions will have to await a description of morphological and semantic developments in Palawa. In Part A the bolded segments in the words in the left hand column preserve [**rŋ**] as a consonant cluster, and the right hand column reflexes and other vestiges of the consonant cluster. In Part B the transcription of schwa in Backhouse and Walker words, and of epenthesis in a Sterling word (left column) are compared with Jorgenson transcriptions of schwa. In Part C the words in the left column preserve rhotics and dorso-velar nasals as final and initial segments, including an

approximant in <try.er.wo.rum>, and laterals as alternations in some further words, and in the right column the bolded segments evidence pronunciation shifts in the rhotics and dorso-velar nasals. In Parts D and E similar points are illustrated in the words for, and to do with *hand*.

Table 7.6.8.1

Part A

-: sn	lārngĕrnĕr	*to stare / track*	cf.	SE: mj	luggaboiné	*track* (footmark)
E: gar	narng.he	*painting themselves*	cf.	SE: gar	nang.en.ner	*painting themselves*
				SE: gar	nun.ner.re	*painting themselves*
E: gar	parng.er.tit.yer	*chief*	cf.	E: gar	parng.her.tet.yer	*chief*
				NE: gar	puck.er.ter.run.ne	*chief*
E: cr	larng.ty.e.lip.pen.ner	*big / large*	cf.	E: gar	long.tine.ner	*big / great*
				NE: cr	la.ke.ca.bone	*big*
NW: gar	largth.gar	*kangaroo*	cf.	N: jj	lalliga	*kangaroo*
E: gar	loe.karng.her.ner	*wallaby*	cf.	E: gar	loe.kar.rer	*wallaby*
-: jj	lowngana	*wallaby*	cf.	E: cr	lo.kung.en.ner	*wallaby*
				SE: fr	kangara	*kangourou*
				E: mj	lukangana	*wallaby*

Part B

-: gar	par.kute.ten.ner	*horse*	cf.	-: jj	parcoothana	*horse*
-: sn	pācōutĕnăr	*horse*		-: jj	baricutana	*horse*
				-: bd	pa.gen.gun.ya	*horse*
				-: bdm	po.gen.gun.ya	*horse*
-: bk	wiber	*black man*	cf.	SE: mj	wiebah	*black man*
-: wb	wībĕr	*black man*		E: jj	wibia	*black man*
-: sn	wībăr	*black man*		N/NW: jj	wybra	*man*
				E: mj	weiba	*black man*
				-: lh	vaiba	*black man*

Part C

E: mj	parrabah	*whale*	cf.	NE: gar	pin.ner.pil.ler	*whale*
				E: gar	pite.her.wun.yer	*whale*
NW: gar	nar.re.wer	*man*	cf.	SE: gar	nāg.gĕr.dĕr	*man*
				SE: gar	neer.nag.ge	*black man*
				SE: gar	nen.nag.ge	*black man*
N/E: gar	pār.nĕr	*native*	cf.	E: gar	pan.nar	*black man*
				SE: gar	par.le.var	*native*
				SE: mj	pallawah	*adult man*
				NW: gar	par.quoi	*young man*
				SE: mj	pawee	*rascal*
E: gar	try.er.wo.rum	*bellyfull*	cf.	SE: gar	tee.le.de	*full stomach*
E: mj	riaweeack	*full after meal*				
E: gar	dre.why.yuck	*bellyful*				

Table 7.6.8.1 - Part C continues

NE: cr	ti.er.lar.re	*come here*	cf.	E: gar	ty.yer.leer	*come*
E: cr	tar.lel.lare	*come*	cf.	NE: gar	ty.he.le	*come*
N: gar	par.lu.mi.rer	*devil*	cf.	N: cr	par.ten.i.e.le	*devil*
				N: gar	put.ten.neel.le	*satan*

PartD

N: rb	nuna	*hand*	cf.	SE: gar	nore.der	*left handed*
NW: gar	nan.ne.min.er	*hand*				
-: sn	nārnĕrmīnnĕr	*hand*				
N: cr	new.tow.way.ne.mine.bi.bu *catch me*					
NW: gar	ning.en.ner	*take hold / up*	cf.	NW: gar	near.red.ding.er	*take hold*
N: gar	mar.ner.nun.de.a.nar.rer *I hit you*					

Part D continues

SE: fr	noeni	*donner un soufflet*				
E: mj	menny	*hit*	cf.	SE: mj	merrhé	*hit*
W/NW: mj	menghboibee rate	*beat*				

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§ 7.6.8.2 Consonant Clusters in Initial Position

Ostensibly a number of Palawa words start with consonant clusters. It is useful at this juncture to summarise the phonological factors which led to the formation and articulation of consonant clusters in word-initial position. It needs to be kept in mind that Palawa stressing patterns usually resulted in the stressing of the first word element in a word, and frequently as a result to the under stressing of following word elements (§ 7.9). Accordingly, the eclipsis of a vowel in an initial word element in the form CCV(C) is an unlikely explanation of the consonant cluster. Secondary stressing of following word elements also occurred, and not infrequently final word elements were also stressed (§ 7.9). In the case of doubly reduplicated words, the stressing patterns typically led to a radical contraction of the first arm, and relatively full preservation of the second arm. The points made are particularly well illustrated by place names, and accordingly Table 7.6.8.2 provides a comprehensive selection of Palawa and Victorian names for streams. The Table serves a number of ancillary purposes. Whether or not the alternation of **<p/b>** with **<m/n>** in word-initial position evidences a semantic change or a pronunciation shift, the names suggests that they had a common proto Australian progenitor, and therefore a major genetic link between the Pama-Nyungan and Palawa languages. Whilst more relevant to a discussion of Palawa morphology, the names are also consistent with their descent from a reduplicated triple limbed progenitor and, relevantly for the purposes of this subsection, in some cases doubly reduplicated words. The salient point is not to establish secondary reduplication, so much as to demonstrate how differences in the names are explicable on the basis of eclipsis, followed in many cases by epenthetic alliteration (§ 7.6.8). Nevertheless, the names also evidence a plausible hypothesis that each

limb in the proto Australian progenitor of many words and names for streams were originally headed by **<p/b>**, and in following limbs the pervasiveness of phonological progessions in the forms **[p] > [b] > [m] > [n]** and **[p] > [b] > [v] > [w]**, followed only very occasionally by shifts to **[r]** and **[l]**. The table also has relevance to the discussion of palatalisation and labiovelarization as factors in the production of consonant clusters (§§ 7.6.3.1, 7.6.3.2, 7.6.7 and below).

As discussed in § 7.6.4.3, orthographic sequences in the forms **<dr>** and **<tr>** are transcriptions of post-alveolar fricatives. The very few transcriptions of **<wr>** and **<rh>** (§ 7.6.2.1) also evidence the articulation of heavily accented, and probably tapped and/or aspirated rhotics in word-initial position. No initial word elements so headed are in the form CØCVC. The post-alveolar fricatives were subject to dissimilation. In other words, a number of these fricatives evolved into consonant clusters, and in turn this led to cluster simplification. As a result they were at times replaced by alveolar stops, lamino-dental stops, and rhotics. But the words that evidence these phonological progressions are never associated with word elements that evidence vowel eclipsis.

Comparative analysis establishes that orthographic sequences in the forms **<gw>**, **<kw>** and **<qu>** evidence labiovelarization (§§ 7.6.3.1 and 7.6.7.2). It also suggests that many, if not all word-initial orthographic sequences in the forms **<cr>**, **<gr>**, **<kr>**, **<cl>**, **<gl>** and **<kl>** evidence labiovelarization. Again, there is no evidence that any transcriptions in these forms mask the eclipsis of a medial vowel.

The bilabial stops were also subject to labiovelarization, evidenced principally by an orthographic sequence in the form **<pu>** (§§ 7.6.3.2 and 7.6.7.2). It therefore seems likely that sequences in the forms **<pr>**, **<pl>**, **
** and **<bl>** also evidence labiovelarization. However, at least hypothetically, the presence of these sequences in the first arm of doubly reduplicated words may instead evidence the fusion of the first two limbs in the first arm. Arguments for and against both hypotheses can be advanced, most of them based on the effect of stressing, but they also involve a discussion of the morphological structure of proto Australian words, and will not be further pursued in this thesis. The first hypothesis was discussed in § 7.6.3.2. Inasmuch as there are numerous Palawa and Victorian place names which are explicable on either basis, it is appropriate to demonstrate the plausibility of fused word elements as a progenitor.

First limb of second arm

It is suggested that **<p>** as a segment preserves **[p/b]** as the original word-initial segment of a proto Australian word for a large water feature. Compare the analysis of *Murrumbiggee* and

other names in § 7.6.6, and the very large number of indigenous Victorian and Tasmanian river names with [**p/b**] in word-initial position in both the names and their following word elements (Table 7.6.8.2; Clark and Heydon 2002).

<**er**> as a transcription, denotes an indistinct unaccented vowel, often transcribed by Milligan and others as <**a**>.

Second limb of second arm

<**t**> evidences eclipsis of the original initial segment, and as a result of epenthetic alliteration its replacement by [**r**]. This was followed by pronunciation shifts from [**r**] to [**l**] to [**d**] to [**t**]. Compare the analysis of <mor.ter.moon.er> in § 7.6.6

The first segment in <**oo**> was at all times a vowel. The second segment evidences the lenition of [**r**].

<**m**> evidences the lenition of [**ŋ**] to [**n**], replaced in due course by [**m**] as an accented alternation as a result of anticipatory assimilation of [**m**] as the initial segment in the third limb.

Third limb of second arm

<**m**> evidences a pronunciation shift from [**b**].

<**e**> was at all times a vowel.

<**l**> evidences a pronunciation shift from [**r**] as the original final segment. As a result of the stressing of the third limb, and the accenting of its final segment, an epenthetic vowel and rhotic converted an originally monosyllabic limb into a disyllabic word element.

The first arm

The fusion hypothesis interprets <plee> as vestigial of the first and second limbs in the first arm, and posits the complete loss of the third limb. On this basis;

<**p**> is vestigial, and preserves the intial segment in the first limb;

<**l**> evidences eclipsis of the first segment in the second limb, and its replacement by epenthetic allilteration;

The first <**e**> was at all times a vowel.

The second <**e**> evidences lenition of a rhotic which was the medial segment in the second limb

The alternative, and more likely hypothesis, interprets <**pl**> as a dissimilated form of [$\mathbf{p^w}$] with a shift from [**w**] to [**r**].

The foregoing comments have concentrated on consonant clusters in word-initial position. The genesis of the consonant clusters can usually be determined by comparison with other comparable names.

As noted, Part A of Table 7.6.8.2 lists a comprehensive list of the Palawa and Victorian names for streams. The names have been grouped. A1 groups those names in which the initial segment in the second word element evidences either the preservation of <p/**b**> in the proto word for a stream, or a pronunciation shift which led to its replacement by either <**m**> or <v/w>. Each of these variations has been subgrouped. A2 groups those names that evidence the eclipsis of the initial segment in the second word element without replacement. A3 groups names which evidence eclipsis of the initial segment, followed by epenthetic alliteration. The names in which the epenthetic segment was ultimately derived from a rhotic have been subgrouped, and precede a subgroup of names in which the epenthetic segment was ultimately derived from a dorso-velar nasal or one of its reflexes. The Victorian names have been presorted to aid the location of the Victorian streams. Names for streams associated with the Murray River and its basin, or located west of longtitude 145° have been listed first, and the two groups have been separated by a line of dots. Similar analytically based sorting could have been undertaken with respect to the third element in the names. But it is probably sufficient to draw attention to the fact that when the third element is disyllabic (thus evidencing stressing), [p/**b**], [**m**] and [**v/w**] were often preserved as the initial segments. Similar comments apply to monosyllabic third word elements in which a consonant or semi-vowel was preserved as a final segment. *Nurtpubbellekoorun* (Yarra River – it is suggested that <koorun> is an explanatory addition); *Murrumbiggee* (Murray River); *Parnimilli* (Little Murray River); *Pullerrermittum* (Murrumbidgee River); *Pollerworrer* (Fitzroy River); *Marraboor* (Little Murray River); *Parnwurt yaluk* (creek, Mt.Campbell Range - <yaluk> is an explanatory addition); and *Nurregeburrewur* (tributary of Moorabool River - <burrewur is an item) provide Victorian examples; and *Plee.per.toom.me.lar* (South Esk River); *Nale.bun.ner More.ter.moon.er* (Great Musselroe River); *Noe.ang.eth.bune.ne.lo.en.tin.ner* (plains of Orielton River); ***Pare.rer.boke*** (Harcus River); and *Nare.rib.bel* (point, Black River) provide Palawa examples. Part B provides a comprehensive selection of comparable common nouns for streams in the Palawa and south eastern Australian languages.

In the names already cited, and in the table, bolding indicates the relevant limbs in a compound name, and underlining the second arm of a doubly reduplicated name. It will be appreciated that in the case of the more contracted words and names judgement as to whether or not they are doubly reduplicated words is not always clear. Additional word elements can be items or explanatory additions. Unless it is reasonably clear that there has been secondary reduplication of this type, the second arm has not been distinguished. The notes in italics are headings which indicate the phonological progression(s) illustrated.

Table 7.6.8.2

Part A	**Victorian Names**	**Palawa Names**		
A1	*p/b and m/n; p/b > m; p/b > v/w*			
(*p/b and m/n*)				
Buck-buck	No.2 stream (Gummow's map)			
Babenorek	Dean Creek	NE	***Boo.be.al.ler***	Great Musselroe River
Barbarton	Wimmera River	NM	***Plee.per.toom.me.lar***	South Esk River
Bar	Wimmera River			
Pang	Hopkins River			
Bung Bundjil	Falls (Wannon River)			
Boorn-boorn	Fitzroy River			
Neporiak	Baillie Creek	S	***Nib.ber.lin***	Derwent River
Moonbalk	Fiery Creek			
Merputyal	Fyans Creek	E	***Mar.poe.yer Men.nan,yer***	Wye River
Mywongidder	river near Mt.Buffalo			
*Mellick **Munjie***	Mellick Munjie Creek			
Babee-j'im	streamlet (Dandenong Ranges)			
Papang	Delatite River			
Porbin yaluk	Lang Lang River			
Mambally	creek W of Mortlake			
Mukpilli	Mt.William Creek			
Moybe kulin	Pipers Creek			
Nambruc	Aberfeldy River			
Nurtpubbellekoorun	Yarra River	NE	***Mee.ter.mer Nar.pen.ner***	George River
(*b > m/n*)				
none				
Barmmubul	Middle Creek	NW	***Nar.moo.row.er.dim***	unnamed river
Balmattum	Faithfull Creek	NW	***Par.mowe.er***	Inglis River
Boymeine yaluk	place (Campaspe River)	NW	***Pang.er.moon.er***	campsite by a stream
Bindi-memial	Tambo River	NE	***Nale.bun.ner More.ter.moon.er***	Great Musselroe River
Nummi-alga	Bald Hill Creek	SW	***Tom.men.nin.ne.vuth.er***	Mulcahy River
Narneian	Brushy Creek	NE	***Moo.ter.moon.ner***	Great Musselroe River
		NW	***Moom.mer.rer.car.tee***	Arthur River
Tongio-memial	Tambo River	NW	***Roy.he.mun.mur.ic***	campsite Arthur River
(*b > v/w*)				
Barrwang	Barwon River	SW	***Man.wone.er***	Spring River
Kondak Baarwon	Barwon River	NW	***May.woo.rim***	Pieman River
Parnwurt yaluk	creek (Mt.Campbell Range)	N	***Pee.wun.gar***	Cam River
Barrwang	Parwan Creek	NW	***Pee.wur.ro***	Black River
Burwang	Ovens River			
Barwidgee	Barwidgee Creek			
Mywongidder	river near Mt.Buffalo			
A2	eclipsis of p/b without epenthesis			
Bangel	Mt.Emu Creek	SE	***Noe.ang.eth.bune.ne.lo.en.tin.ner***	plains of Orielton River
Mellick	Mellick Munjie Creek	NM	***Moo.er.ne.we.peen.er***	'Horton's farm' on Macquarie River

Table 7.6.8.2 continues

Part A	**Victorian Names**	**Palawa Names**		
A2	eclipsis of p/b without epenthesis			
Mungowak	Painkalac Creek	NM	*MaCreeker.ler*	Ross Bridge
Doma-mungie	Doma Mungi Creek	NM	*Mangana Lienta*	South Esk
		E	*Mung.her.rat.ter May.nay.yer.bone.ner*	Swan River
Parnginermin	Fiery Creek	CP	*Bang.en.er.Wap.po*	Ouse River
Banyeng Banip	waterholes Avon River			
Parnimilli	Little Murray River			
Byer	Loddon River	S	*Ray.ghe.py.er.ren.ne*	Derwent River
Pe-er	Coliban River	NM	*Pee.er.ret.ter* country at Parramores Creek	
.....				
Byourac	Thomson Creek			
Bram-ar-rung	Newland Backwater			
Mirghe-mur	Mirghe-mur Creek			
A3	*p/b > r > l > t/d*			
(*p/b > r*)				
Barnnmubul	Middle Creek at Cathkin			

Table 7.6.8.2 continues

Part A	**Victorian Names**	**Palawa Names**		
A3	*p/b > r > l > t/d*			
(*p/b > r*)				
Bareng	Wannon River			
Brah	Mosquito Creek			
Barrawy	Glenelg River			
Barrum-Barrum	Baarham River			
Barringtheerr	tributary of Mt.Emu Creek	W	*Pane.run.ner*	*Henty River*
Bayrong	creek at Terang			
Birret Mirrian	river (Mt.Eckersley)			
Bariyaluk	Wannon River			
Borroinyel-o	Hopkins River			
Bura	Hopkins River			
Pirron yaluk	Pirron Yallock Creek			
Poorranggurtwoorrot	tributary (Curdies Ri.)			
Barringayaluk	Mt.Emu Creek / Fiery Creek			
Baribial	Mt.William Creek			
Boregam	Campaspe River			
Booraire	Reedy Creek			
Berrepit	Broken River			
Nurregeburrewur	tributary of Moorabool River			
Barri yalug	Fyans Creek			
Bayyango	Goulburn River			
Merimeriewokewoke	Manton Creek	SW	*My.ner.me*	Alec Rivulet
Merrimingger	Maramingo Creek	N	*Moor.ron.noe*	South Esk at Hadspen
Mirrangbamurn	Maribyrong River			
Martgutty	'1st creek up ...'			
Murrindal	Murrindal River			
Marrongwil	country at Kinypanial Creek			
Narabool	Doctors Creek			
Murrabool	Moorabool River			
Murrabit	Murrabit River			
Murrumbiggee	Murray River			
Murrundindi	Murrundindi River			
Narringhil	tributary of Woudy Yalloak River			
Nowre Nowre	creek of Lake Tyers	CP	*Nore.ruCreeker Men.nan.yer*	Shannon River
Nurregeburrewur	tributary of Moorabool River			
Marraboor	Little Murray River			

Table 7.6.8.2 continues

Part A	**Victorian Names**	**Palawa Names**		
A3	*p/b > r > l > t/d*			
(*p/b > r*)				
Yoleterwil-meerin	Loddon River			
Narrogate	mouth of Curdies River			
Narerwerp	'creek joins Yar.ark'			
Narracan	Narracan Creek			
Maridayaluk	Maridayallock homestead			
Marree	Merri River			
Mura-mura	Moora Moora Creek			
Merrijig / Merrigig	Merrijig Creek			
.....				
Borebine	Huttons Creek			
Barrummubul	Middle Creek			
Berrawan	Tambo River			
Brokil	Brokil Creek			
Birrarrung	Yarra River			
Pirron yaluk	Pirron Yallock Creek			
Poorranggurtwoorrot	tributary (Curdies River)			
Barringayaluk	Mt.Emu Creek			
Barringayaluk	Fiery Creek			
Baribial	Mt.William Creek	NW	***Pare.rer.boke***	Harcus River
Barri yalug	Fyans Creek			
Birrarrung	Yarra River			
Marrongwil	country at Kinypanial Creek			
Marree	Merri River	W	***My.rer.me***	Alec Rivulet
Mura-mura	Moora Moora Creek			
Merrijig / Merrigig	Merrijig Creek			
Murrabool	Moorabool River			
Mellick Munjie	Mellick Munjie Creek			
Molibar	Norton Creek			
Mirrangbamurn	Maribyrong River	N	***Moor.ron.noe***	*South Esk River*
Murrabool	Moorabool River	NW	***Nare.rib.bel***	point Black River
Merri Merri	tributary of Yarra River			
Narabool	waterhole Doctors Creek			
(*p/b > r >l*)				
Blindit'yin	Tarra River	N	***Ple.luke.her.me***	Inglis River
Bealiba	creek at Cochranes			
Bulla-bul	tributary (Loddon River)	N	***Pil.er.way.ta*** *Creeken.ter*	George Town Pt.
Bea-lowa-jan	Spring Creek	N	***Ple.luke.her.me***	Inglis River
Bealiba	creek at Cochranes			
Bolealong	Bet Bet Creek			
Bulla-bul	tributary (Loddon River)			
Bullarook	Bullarook Creek			
Bullop Byoway	Bullock Creek			
Baller baller *cort*	junction Hopkins River and Salt Creek			
Billiwhin	Wimmera River			
Palamarra	waterhole Tallangalook Creek			
Billimina	Cultivation Creek			
Pollerworrer	Fitzroy River			
Wimgot-Paloon	Fitzroy River			
Pullerermittum	Murrumbidgee River (NSW)	NE	***Pree.lune.ner***	Great Musselroe River
.....				
Balla-balla	Ballar Creek			
Balim-balim	confluence of 2 creeks			
Baala	Broken Creek			
Bulen-bulen	Brandy Creek			

Table 7.6.8.2 continues

Part A	Victorian Names		Palawa Names	
A3	*p/b > r > l > t/d*			
(p/b > r > l)				
Palawrone	Palawrone Creek			
Pallingil yaluk	river near Dindelong			
Pullergil-yaluk	Loddon River			
Blindit'yin	TarraRiver			
(p/b > r > l > t/d)				
Purdidj	Burnt Creek	SW	***Par.dar.rer***	Nomeme Creek
Bandar warrean	Pleasant Creek	NW	***Pane.tur.he.yac***	Harcus River
Puntiyarraman	creek at 'Little Corangite'			
Bung ***Buudjil***	Falls (Wannon River)			
Bottran	Fitzroy River	NW	***Par.ter.tuth.er.pel.luke.er.de***	Perkins Channel
Bidawal	Bidwell Creek	NM	***Plee.per.toom.me.lar***	South Esk River
Bundarra	Bundara River	NW	***More.ze.zan.ner.kil.le.bue.le***	Duck River
Mellick Munjie	Mellick Munjie Creek	SM	*Mel.lare.re.**mer.tit.ter***	stream ex Black Johnnys Marsh
Martgutty	'1st creek up ...'	NE	***Mee.ter.mer*** *Nar.pen.ner*	George River
Mayjowreenyoke	Creek W side of Colungulak none	NW	***More.te.way.nart.ye***	Cam river
Moyjil	mouth of Hopkins River	NE	***Nale.bun.ner*** *More.ter.moon.er*	Great Musselroe River
A3	*p/b > r > l > t/d*			
Bendoc	Bendoc River	NE	***Par.trole.ler*** *Kar.tote.ter*	Little Musselroe River
Tjeerrang ***bundit***	Parker River			
Bindi-*memial*	TamboRiver			
Malloowurru	Malloowurru River			
Mullum-mullum	Mullum-mullum Creek			
Mida-modoeng	Mitta Mitta River			
Mudgegonga	waterfall (Spring Creek)	NE	***Mue.ter.min.ne***	Pipers River
*Waddy-****mundowie***	Corryong Creek	NW	***Mane.drang.er***	Detention River
Natimuk	Natimuk Creek			
Natte yaluk	Avon River			
Mudyin gadjin	Loddon River	NW	***Nor.de.kel.luke.he.de***	Boat River
Matang	Grange Burn			
Medouranook	Timboon Creek Georges River	NE	***Mee.ter.mer*** *Nar.pen.ner*	
A4	*p/b > ŋ > k; p/b > ŋ > n/m*			
(ŋ > n')				
Neenyeyalukbung	Mollisons Creek			
(ŋ > k/g)				
Bangel	Mt.Emu Creek			
Boregam	Campaspe River			
Bugara	Glenelg River			
Bogalara	Powers Creek			
Painkalac	Painkalac Creek			
Pookarr	river opp. 'Eumarella' run			
Puckapunyal	Puckapunyal Creek			
Tangang ***punhart***	Hopkins Falls			
Pookarr	lower reaches of Hopkins River			

Table 7.6.8.2 continues

Part A	Victorian Names		Palawa Names	
A4	*p/b > y > k; p/b > y > w/m*			
(y > k/g)				
Barkar	upper reaches Wimmera River			
Boca	Avon River			
Mincamemebeal	'creek at Capt.Allen's'			
Moangull	Mongrel Creek			
Migunang wirab	McKenzie Falls			
Miakite	Miakite Creek			
Mukpilli	Mt.William Creek			
Murgheboluc	watercourse N of Barwon River			
Neel-cun-nun	creek from which Myndie drinks			
.....				
Mugan	Delegate River			
Doma-nungic	Doma Mungi Creek			
(y > n)				
Benalta	Broken River			
Boonabirrah	Boonabirrah Creek			
Poonenun	Broken River	SW	*Poe.no.var*	'Friendly River'
Punnen pareng	creek at Hutton's			
Punninillon	creek at Mollison's hut			
Bunong	Muston Creek			
Punu	'river running ...'			
Bunnidj	MacKenzie River			
Bunnut	Wimmera River			
Poonong poonong	waterhole (Hopkins River)			
Barnunung	Richardson River			
Parninilli	Little Murray River			
Buniya-yaluk	Fyansford			
Mamabadar	tributary of Naringhill Creek	SW	*My.ner.me*	Alec Rivulet
Minne-minne	Loddon River			
.....				
Binn	Bemm River			
Benambera	Benambra Creek			
Pinnetoo	little river (Rame Head)			
Bonenodo	Devils River			
Tonggio-panterer	Tambo River	W	*Pane.run.ner*	HentyRiver
Bourneea	Cornella Creek			
Menne	Merriman Creek	E	*Mung.her.rat.ter*	*May.nay.yer.bone.ner* Swan River

Part B

PN Language	Word	Gloss	Palawa	Word	Gloss
Bundjalung	**balun**	*river*	NW: gar	**pay.then.known.dur.ic**	*river*
Wiradjuri	**bila**	*river*	N/NW	**ploo.hor.ne**	*river*
Paakantyi	**paaka**	*river*	SE: mj	**penghana**	*ford*
Kaurna	**parri**	*river*			
Wembawemba	kurang **pirr**	*river*	E: gar	**me.nan.yer**	*river*
Bunganditj	**pawurr**	*river*	NE: gar	**mor.ter.moon.ner**	*river*
Warrnambool	**purrang**	*river*	E: jj	**montumana**	*rivulet*
Warrnambool	**pukara**	*river*	W: jj	**nabowla**	*river*
Warrnambool	**pipikal**	*river*	W: gar	**moker.lun.er.nad.er.ic**	*waterfall*

§ 7.7 Transcriptions of Semi-vowels

Semi-vowels are the non syllabic counterparts of vowels (Hock 1991: 17). The virtual absence in Palawa of vowels as word-initial segments means that most transcriptions of **<w>**, **<y>,** and in French transcriptions of **<ou>** in this position, are unambiguously transcriptions of semi-vowels. Transcriptions of **<ou>** to one side, an examination of Palawa words with vowels in word-intial position reveals that the vowel has been exposed by the eclipsis of a consonant, or at least hypothetically a semi-vowel. However, the proposition does not always hold in the case of the initial segments in following word elements. The words for *stone / rock* grouped under <pee.your.rer> in *Wordlist* (p.412) illustrate the point. See also the words grouped under <boatta> on page 410, and <poningalee> on page 412. The words present as derivatives of a progenitor with three word elements in which the first element commenced with [**p/b**], and in which there has been eclipsis of the original consonant in the second element. However, there is no satisfactory evidence of alliteration providing an epenthetic replacement. The most economical explanation of the words listed under <pee.you.rer> is that accenting of the exposed vowel in the second word element produced an articulation which however identified by the European recorders was identified as a separate sound, and transcribed as a semi-vowel. Perhaps significantly Sterling did not identify an epenthetic segment in his transcription on <pēurăr>.

§ 7.7.1 Labio-velar Semi-vowels

The great preponderance of words and place names with **<w/v>** in word-initial position have no apparent cognates in which the initial segment is not either **<w>** or **<v>**. Whilst this suggests that the words and names evidence semantic changes, there are some exceptions. The major exception comprises those words which as a group of apparent cognates evidence labiovelarization of either a dorso-velar nasal or a dorso-velar stop (§§ 7.6.3.2 and 7.6.7.2), followed by dissimilation and eclipsis (§§ 7.6.8 and 7.6.8.1). The full phonological progression was [ŋ] / [**k/g**] > [**k^{w}/g^{w}**] > [**w**] > [**v**], and was discussed in § 7.6.3.1. Examples were provided in its accompanying table. There are also a few words which are consistent with the dissimilation of a labiovelarised bilabial stop, followed by eclipsis of [**p/b**]. The phonological progression was [**p/b**] > [**p^{w}/b^{w}**] > [**w**] > [**v**], and was discussed in § 7.6.3.2. Examples were provided in its accompanying table. Finally, but very rarely, a natural pronunciation shift is a plausible explanation (§ 7.6.3.2). The phonological progression was [**p**] > [**b**] > [**v**] > [**w**]. Tables 7.6.3.2(b) and 7.6.3.2(c) provide examples. Accordingly, it can be confidently assumed that transcriptions of **<w>** in word-initial position denote [**w**] as a

segment, and that the same comment applies to French transcriptions of <**ou**> in word-initial position.

Pronunciation shifts frequently affected [**p/b**] as the initial segment in a following word element (§ 7.6.8.1). The usual phonological progression was [**b**] > [**v**] > [**w**] > [**u**], subject to the caveatthat transcriptions of <**u**> may in a number of cases evidence an alternation perceived by the European recorder, rather than the articulation of [**u**] as a segment. Labiovelarization of the bilabial in this position also occurred, and was often followed by dissimilation. However, transcriptions of labiovelarised stops in following word elements are in the forms **ku**V, **cu**V, **gu**V, **pu**V and **bu**V, and never in the forms **kw**V, **pw**V etc. Some transcriptions in the form CoV may also evidence labiovelarization. Both sets of transcriptions can be ambiguous in that the second vowel may evidence the lenition of a rhotic. Examples areprovided in Part A of Table 7.7.1.

Hypothetically, a transcription of <**w**> as the initial segment in a following word element may evidence eclipsis of the original segment, followed by epenthetic alliteration involving a rhotic in final position in the preceding word element. There is no unequivocal evidence of this. Nevertheless, it can only be assumed that a segment in initial position in a word element transcribed as <**w**> was articulated as [**w**] when there are apparent cognates in which the corresponding segment was transcribed as either <**p**> or <**v**>, or if etymological analysis can establish that the transcribed word was a compound word with an item or qualifier with [**w**] in initial position. Some examples are provided in Part B of Table7.7.1.

In contexts where the word element was not stressed, and/or the medial or final consonant was unaccented, a medial or final rhotic was often replaced by other segments which included segments transcribed as <**w**>, <**u**> and <**y**>, and in appropriate contexts other vowels. There is no evidence that in this position rhotics contrasted with either of the semi-vowels. Accordingly, in these contexts the transcriptions can also be interpreted as lenited forms of the rhotic. The transcriptions may include perceived alternations of an approximant (§ 7.6.2.1). Part C of Table 7.7.1 provides examples.The French transcriptions of C**u** and <**ou**> in medial position suggest that the transcriptions of <**w**> and <**u**> evidence articulations of segments very similar to a like segment in word-initial position. Accordingly it seems likely that the articulations were like [**ŷ**] short, and perhaps often less than one mora in length. Robinson transcriptions such as W:NW gar <**kown**.de.yer> (*Wordlist*: 112) support the surmise.

As noted in § 7.3.1, Robinson transcriptions of <**ow**> and <**ou**> recorded the articulation of separate segments, and did not record the articulation of diphthongs. The comment probably

applies to all Robinson and Jorgenson transcriptions of **<ow>**, **<ou>**, **<aw>**, **<au>**, and **<ew>**. This is to be contrasted with Milligan's transcriptions of **<ou>**, used by him to denote the diphthong pronounced in English *noun*, and **<aa>**, used by him to denote another diphthong pronounced as in English *lawn* (§ 7.5.1.3). The first segment in the Robinson and Jorgenson transcriptions was a vowel, and the final segment very similar in its articulation to a labio-velar semi-vowel. Again it is likely that in most word elements its length was less than one mora (§ 7.3.1). There are several salient points. In most of the Robinson and Jorgenson transcriptions, the second vowel evidences the lenition of a rhotic in medial or final position, and may evidence the articulation of an approximant. Dissimilation of the preceding vowel would appear to have occurred only rarely. In transcriptions of **<w.w>** and **<ww>** the segments invariably straddle syllabic boundaries, and it can be inferred that the first segment in the couplet was also an approximant or similar. Whether or not the sound identified was an approximant, it was the product of a lack of the accenting of a rhotic as a final segment in the word element; and the second segment was a product of the eclipsis of the initial segment in a following unstressed word element, followed by epenthetic alliteration. Transcriptions of **[w]** and **[u]** as the second segment in a 'vowel' cluster thus usually provide reliable information with respect to the one time articulation of a rhotic in final position, and of a phonological progression which had its genesis ultimately in [rŋ] as a retroflexed dorso-velar nasal. Apparent cognates transcribed by Milligan in which a single labio-velar semi-vowel is transcribed in the place of geminate labio-velar semi-vowels are supportive (§ 7.6.8.1). There can be no certainty that transcriptions of **<w>** in these contexts denoted **[w]**.

The relatively very few words in which **<wl>** was transcribed all straddle syllabic boundaries. They are thus explicable as phonological progressions which originally probably involved a retroflexed dorso-velar nasal as the final segment in a preceding word element; its dissimilation followed by the loss of **<ŋ>**; loss of the initial segment in the following word element; epenthetic alliteration which produced geminate rhotics; and pronunciation shifts which led to **<w>** and **<l>** as their respective replacements. Again, there can be no certainty that transcriptions of **<w>** in these contexts denoted **[w]**.

In Part A of Table 7.7.1 bolding indicates the relevant lexeme(s). In Part B bolding indicates the relevant segments, the words in the left hand column evidence the original articulation of a bilabial stop or semi-vowel in initial position, and the words in the right hand column, the pronunciation shift. In Part C bolding indicates the relevant segments. In Part D bolding indicates the relevant segments, the left hand column lists words in which a rhotic has been replaced by a semi-vowel or an approximant, and the right hand column the segments which were allophones. Underlining indicates the second arm of a doubly reduplicated word.

Table 7.7.1

Part A

-: jj	luiropuy picanini	*native boat*	E: mj	tialapué	*keep*
SE: mj	poany pueré	*intersect*	E: mj	unginnapuee	*intersect*
SE: gar	par.poe.gen.ne	*snow*	SE: mj	panubré roeelapoerack	*sunrise*
E: mj	pewenya poeena	*spring*			
SE: fr	beguia	*doigt*	SE: fr	pereloigui	*ongle*
SE: fr	pérogui	*arbre*	SE: fr	maré dongui	*donner*
-: sn	cāllĕcōoghĕnār	*magpie*			

Part B

W: jj	cawarany	*belly*	cf.	W: lh	kaviranara	*belly*
SE: gar	loughwe	*short*	cf.	-: lh	lavara	*little*
N: gar	nal.ler.ware	*quartz stone used to sharpen spears and cut kangaroo*	cf.	SE: gar	nyvĕe	*knife*
SE: fr	panubéré	*soleil*	cf.	SE: gar	pān.nū.ver.re	*sun*
E/SE: mj	boobyallah	*A maritima*	cf.	-: sn	pāvemínnêr	*prickly mimosa*

Lore.pur.rer.lee.ver.ler country 'at the Arthur Mountains'
cf. *Loe.won.tume.me.ter* region N of Arthur Range

Part C

SE: mj	coorima	*fang*	cf.	W: cr	cow.wer	*teeth*
SE: ck	harbegaree	*teeth*		N: jj	cawna	*teeth*
-: sn	trārwĕmār	*tongue*	cf.	NE: cr	trow.wa.ner	*tongue*
				W: jj	tullanee	*tongue*
E: cr	norn.te.ma.ner	*sister*	cf.	E: mj	nowantareena	*sister*
				E: gar	nown.de.men.ner	*little sister*
				E: gar	noun.de.men.ner	*little sister*
NW: gar	more.re.ten.ner	*good spirit*	cf.	N: gar	noune.doop.pen.er	*God*
NW: gar	nare.rer	*good spirit*		NE: gar	noi.heen.ner	*God / good spirit*
SE: mj	moorleah	*volute fusiformis*	cf.	E: gar	moy.ge.moe.gur.er	*cowrie*
SE: gar	nōor.rĕ.wōr.rĕr	*narrowwhiteshell*	cf.	-: gar	mun.drow.wer.de	*shelllike 'lay'*
NE: gar	nar.no.bun.ner	*electric spark*	cf.	SE: jj	nammorgun	*lightning*
				-: gar	now.hum.mer	*lightning*
				NE: gae	noi.hee.ner	*electric spark*
W: cr	trar.wer.er.kike	*nose*	cf.	W: gar	drow.wer.rid.de.yer	*nose*
SE: mj	coorina	*fang*	cf.	NW:	cow.war	*teeth*
SE: ck	ka'my	*teeth / mouth / tongue*		NW: jj	cawua	*teeth*
SE: jj	lowdina	*dog*	cf.	NW: gar	low.wer.nin.er	*dog*
SE:	wore.ner	*asparagus like plant*	cf.	SE: gar	waw.ner	*gohaner* (plant)
E: gar	lore.ling.en.ner	*hole / cave*	cf.	E: jj	lewnana	*den*
SE: fr	nouré	*poux*	cf.	-: sn	nēunār	*flea*
				E: gar	new.nar	*louse*
N: gar	lur.ran.ner	*ear*	cf.	W: jj	lewlina	*ear*

Part D

W: jj	lewlina	*ear*	cf.	N: gar	lur.ran.ner	*ear*
				NE: gar	loo.ren.ner	*ear*
NE: gar	pew.le.wat.ter	*penis*	cf.	NE: gar	pal.le.kan.nar	*penis*
-: ar	trowley	*bush*	cf.	W: gar	tor.rone	*bush*
NE: cr	cowl.ick	*cold*	cf.	NE: cr	par.cul.lar	*cold*
NE: cr	par.trow.ler	*fire*	cf.	N?: gar	pārtrōl.lĕr	*fire*

Table 7.7.1
Part C continues

SE: gar	bōw.ly	*two*	cf. SE: fr	bourai	*deux*
			E: fr	boulla	*deux (nombre)*
E: mj	rawlinna	*wind*	cf. SE: mj	rallinga proiena	*high wind*

§ 7.7.2 Palato Semi-vowels

The transcription of <y> in word-initial position probably evidences the semantic assimilation of vernacular words and place-names to indicate a water feature. Whilst a full exposition of the observation as a linguistic proposition is beyond the scope of this thesis, some instructive comments based on comparative analyses can nevertheless be provided. There are very few Palawa words with <y> in word-initial position, and in this position they were, whilst more common, nevertheless also relatively rare in the south eastern Australian lexicons. Perhaps significantly, only two Palawa place names so headed were recorded, viz <**Yer.**man.nun.yer> (Wye River - *Place Names*: 95) and <**Ying.in.ner**> (the Great Lake, see p.95). However, <Lue.ber.no.**youl.ler**> (D'Entrecasteaux Channel, see p.29), and <**yer**> / <**ya**> as a suffix, and perhaps an item or explanatory addition in some other names, and in words for *river* sublisted under <me.nan.yer> (*Wordlist*: 372) are apparent cognates. Neither name has any other surface forms in the Palawa lexicons of ordinary words. Yet **/Yarro-yarro/** as a name for the Yarra River, **/yaluk/** = *creek,* and numerous analogous Victorian place names (Clark and Heydon 2002: 254-260) evidence the presence of identically headed names and words in the Victorian lexicons. This supports a surmise that Palawa words with palato semi-vowels in word-initial position have genetic links with Victorian Pama-Nyungan words for water features. Examples are listed in Tables 7.7.2(a) and 7.7.2(b).

Ostensibly two Cunningham words constitute the only possible, albeit rather unlikely, exceptions. The words are W: cu <yīr'răwig> and <yir'.a.wig> = *arm* (*Wordlist*: 83). Plomley has in my view correctly sublisted the words with other Western speech words sublisted under <dray.wur.rid.dic>. The resemblance of <**dray.wur.rid.dic**> toNE: gar <**dray.wool.ler**> = *elbow*; W: gar <**dray.bur.ic**> = *hand*, and W: cr <**drar.bur.ick**> = *finger* may well be significant. There are no clearly cognate Warrnambool words, but due allowance must be made for the dissimilation and lenition of the post-alveolar fricative [d^r] in the Pama-Nyungan languages during the Holocene. Attention is drawn to Warrnambool **/thaling/** and <**jallayn**> = *elbow*; <**yula**heulop **tiyaeaer**> and **/taeaer /**= *forefinger*, <**tukuuk** marang> = *palm;* and **/towirrin/** = *nail*, all of which are comparable, and perhaps in some cases marginalised words. Bunganditj **/tarro-wu/** = *left arm*, perhaps another marginalised word, clearly presents as a genetically linked word, as does **/dhalayn/** = *elbow*. Other comparable

words include Diyari **/thinthipirri/** and Kaurna **/tidngi/** = *elbow;* Wembawemba **/thathakuk/** = *arm*; Wembawemba **/yulp/** = *hand*; quite strikingly the ostensibly quite disparate Wembawemba words **/tunep/** and **/yalep-yalep/** = *finger;* Woiwurrung **/dharrak/** = *arm*; and Wiradjuri **/yuuluu/** = *fingernail.* In other words, the Palawa Western speech words present as, and can be reconciled as, genetically linked words. In Table 7.7.2(a), bolding indicates the relevant segments. Words in the left hand column are Palawa words, and in the right hand column apparent cognates in the Pama-Nyungan lexicons. When allowance is made for eclipsis and epenthetic alliteration (§ 7.6.8), the words in both columns present as cognates.

Table 7.7.2(a)

W/NW: mj	yennaleah	*tooth*	cf.	Wiradjuri	yirang	*tooth*
N: gar	yarn.ner	*teeth*		(and see also Table 7.7.2(a))		
E: mj	yennemmee	*anoint*	cf.	Woiwurrung	yellana durruk	*decorate*
				Warrnambool	yurn	*clay*
				Wembawemba	yuka	*paint*
E: gar	yarm.men.ner	*grass-tree*	cf.	Sydney	yagali	*grass-tree*
NW: gar	yam.mer.ner	*grass-tree*		Warrnambool	yalanda	*grass-tree*
E: mj	yolla	*mutton bird*	cf.	Kaurna	yao	*seagull*
	yen.na	as an item = *bird*	cf.	Woiwurrung	yanggai	*black cockatoo*
E: gar	**no.**ye.mac	*no*	cf.	Woiwurrung	**nyu**dha	*no*
				Warrnambool	**ng**aluwitj	*no*
				Paakantyi	**ngaa**tha	*no / nothing*
N: gar	yome	*no*		Warrnambool	yuwapu	*no*
				Bundjalung	yogam	*no*

<y> was also rarely transcribed as the initial segment in following word elements,. Its genesis as an initial segment in this position may at times have involved semantic assimilation, and at other times epenthetic alliteration coupled with the lenition of a rhotic or dorso-velar nasal. In other words, it involved the incorporation of an already existing independent lexeme as a lexical suffix. Thus in NE: gar <larm.te.**yar.ner**> = *gums* (*Wordlist*: 111), the bolded lexeme comprises an item or explanatory addition which refers to *teeth,* and can be compared with the words for *teeth* sublisted under <yar.ner> (p.110) and the examples provided above. The salient point here is that as illustrated by the words listed in Table 7.7.2(b), the Palawa and south eastern Australian words for *teeth* illustrate a phonological progression from [**d**$^{\mathbf{r}}$] to [**t/d**] to [**t**$^{\mathbf{y}}$**/d**$^{\mathbf{y}}$] to [**j**], there are no earlier or intermediate forms in Palawa, and the Palawa words with [**j**] in word-initial position are confined to words in the Nara lexicons. Compare, however, the Palawa words for *bite* listed in the table. In <**larm.te**.yar.ner> the first lexeme

presents as a marginalised word for *teeth* with no closely identifiable connections, to which <yar.ner> has been added as an explanatory addition.

Table 7.7.2(b)

W/NW: mj	yennaleah	*tooth*	cf.	Wiradjuri	yirang	*tooth*
N: gar	yarn.ner	*teeth*				
Cf.						
E: gar	drang.er.ner	*bite / taste*				
N: gar	dreep.er.cre.er.le	*bite / taste*				
				Sydney	dara	*tooth*
				Bundjalung	diraŋ	*tooth*
				Warrnambool	thangang	*tooth*
				Bunganditj	thanga	*tooth*
				Bunganditj	djim-djim	*toothache*
				Diyari	tia	*tooth*
				Kauma	tiarka	*toothpick*
E: mj	ralkwomma	*bite*				
SE: mj	rebkarranah	*bite*				
NE: gar	larm.te.yar.ner	*gums*				
-: sn	lēeănēr	*teeth*		Woiwurrung	liang	*tooth*
E: gar	lear.nar	*teeth*				
-: sn	lēeănnēr	*bite*				

The transcription of a nonsegmental <y> in digraphs which recorded palatised consonants was discussed in § 7.6.7. As then noted, some of these transcriptions may instead evidence the attrition of a word element originally in the form CVr. Comparative analysis rules out the transcription of <y> in final position as a diphthong.

§ 7.8 Vowels

In the initial discussion of Palawa consonants, an analogy was drawn between the recognition of a limited range of utterances as a phoneme, and the recognition and classification of colours. The analogy is not so apt as an approach to a classification and understanding of the sounds recorded by the European recorders as vowels. Whilst it is inappropriate to use Milligan's epithets, there is no reason to disagree with the essential observation conveyed in his reference to 'carelessness and laxity of articulation ... in the application and pronunciation of words' (1890: 9-10). As will be discussed in § 7.8.6, in many, perhaps most contexts, Palawa vowels were not contrastive. Accordingly, in these contexts the Palawa were subject to few semantic restraints as to how they articulated the 'vowels' which served to bind and define word elements as unique units in words. The lack of contrasting in vowels and its consequences for interpretative purposes is so unusual, that the point needs to be emphasised. In the Indo-European languages all pure vowels tend to be contrastive, and their speakers have an intuitive comprehension of those contexts in which they form instead part of an

allophonic set. Thus in (south eastern) and (Australian) English <**u**> is typically articulated as [**a**] before a consonant, whilst in the English Midlands it is articulated as [**ʌ**] (Crystal 1995: 240), but the remaining segments in a word, and the context provided by the sentence itself, remove the ambiguity potentially created. In many Pama-Nyungan languages there is 'a system of just three vowels at the phonological level' (Crowley and Dixon 1981: 412). For the reasons stated, a table of vowels is of little assistance, would be potentially misleading, and will not be presented. However, I have no great disagreement with the Crowley and Dixon table (1981: 412) in terms of an indication of the likely range of the sounds articulated.

Milligan believed that a major contributing factor to the variability in the articulation of Palawa vowels was the Palawa use of gesticulation and signs to supplement not only the meaning of words as such, but also 'to give force, precision and character to vocal sounds' (1890: 9). Milligan's surmise is very plausible. The Palawa may well have used gesticulations, signs and body language because habitually they were usually within each other's visiion, and because as hunters silence was enjoined in the pursuit of prey. Nevertheless,as many Palawa groups of words for common objects and phenomena illustrate, the recorded Palawa lexicons were by no means completely impoverished. Many words for ostensibly the same object or phenomenon had different sources. Some of the ostensibly different pronunciations of what were otherwise the same words may have conveyed additional different connotations. In other words, their apparent sameness in semantic content is likely to have been at least in part a product of the glosses attributed to the words, and reflect an inability on the part of the recorders to recognise either word elements, or else semantic modifications which would have conveyed untranslated information to a Palawa listener. As an example, Jorgenson glossed SE: <ri**lia**> as *hand* (*Wordlist*: 86), whereas the apparently cognates recorded by the French were more correctly glossed as *hands*. The matters now raised were touched on in § 5.3. Most colonists did not, and one suspects many nineteenth and twentieth-century commentators have not, appreciated that Palawa words incorporate affixes which provide connotations and nuances usually expressed in Indo-European languages by adjectives, adverbs, and prepositions. Whilst many of these connotations and nuances are no longer recoverable, an understanding of the semantic changes in the Palawa languages and the morphological structuring of Palawa words should provide considerable further information. In the meantime it should not be assumed that the transcription of ostensibly different vowels in Palawa words indicates carelessness or inconsistency on the part of their recorders (cf. Crowley and Dixon 1981: 405). Indeed, the Crowley-Dixon discussion of Palawa phonology on page 405 is flawed by an assumption that Palawa segments were pronounced in uniform ways not only by each informant, but also in

the different dialects and languages (p.406). Most importantly, in the absence of corroborative evidence it should not be assumed that the vowels were contrastive with each other (§ 7.8.6).

§ 7.8.1 Vowel Clusters

The most cursory examination of *Wordlist* reveals the very high number of transcriptions of Palawa words in which, at least ostensibly, clusters of vowels were recorded. At first sight the transcriptions record the articulation of consecutive vowels, or diphthongs, or phenomena such as palatalisation, labiovelarization, dissimilation and the like. Transcriptions of **<aa>**, **<ee>**, **<ii>** **<oo>** and **<uu>** present the further possibility that they record long vowels and/or diphthongs such as **[a:]**, **[i:]**, **[au]** and **[u:]**. Apart from the information provided by Milligan (§ 7.5.1.3) and Walker (§ 7.5.2), comparative analysis often enables the articulation of the transcriptions to be determined.

§ 7.8.1.1 Geminate Vowels

Milligan used **<ee>** and **<oo>** as digraphs to record the long vowels **[i:]** and **[u:]** (§ 7.5.1.3). No inconsistencies in his use of the digraphs have been identified. The same transcriptions appear in words recorded by the Robinsons, Sterling, Jorgenson, Cunningham, Walker (no examples of **<ee>**), Backhouse (ditto), Scott and Brown; but not by M'Geary. The diacritics recorded by George Augustus Robinson, Sterling, Walker and Cunningham (§§ 7.3.1, 7.3.2 and 7.3.3), make it clear that in words so marked their transcriptions of **<ee>** and **<oo>** are not digraphs, but ostensibly geminate vowels as such, or else two similarly articulated vowels as a cluster. The large number of words recorded with diacritics, the absence of any unequivocal exceptions to the proposition stated, and comparisons of the transcriptions virtually establish a conclusion that none of these recorders used either **<ee>** or **<oo>** to record long vowels. Scott's transcriptions in this respect are more ambiguous. However, comparative analysis of apparent cognates transcribed by other recorders indicate that his transcriptions also are consistent with the conclusion reached. Similar comments apply to transcriptions of **<aa>**, **<ii>**, and **<uu>**, and it is inferred that, Milligan perhaps excepted, none of these transcriptions should be interpreted as recordings of long vowels or other single segments.

The exact articulation of the second vowel in the couplets is usually more uncertain. A full exposition of the semantic changes which have taken place in the Palawa languages, and of their archaic morphology, will enable a better assessment of these vowels. In the meantime, the discussion of ***Koop.er.rer****.par.tole.ler* and ***Kobe.ber.rer****.kar.tole.ler* in § 7.3.1 provides an example. As noted earlier, geminate vowels can sometimes mask the palatalisation,

labiovelarization, and/or dissimilation of consonants (§§ 7.6.2.4, 7.6.7.1 and 7.6.7.2), and in the case of consonants in final position in word elements, the lenition of rhotics and dorso-velar nasals (§ 7.6.8.1). There is no evidence that the second vowel in these couplets was ever phonemic. On the other hand, the presence of a vowel cluster, whether or not geminate may have provided semantic information. Thus, reflexes of *lia to indicate a plurality, at times evidence the dissimilation of a lamino-palatal lateral, and at other times a pronunciation shift in a palatised apico-alveolar stop which as a word-final segment and morpheme conveyed the same semantic information (§ 7.1.1.3). The transcriptions usually provide no information as to the length of the sounds transcribed. A 'vowel' with a length of less than one mora as the first member of a couplet may have been contrastive within Palawa perceptions. Table 7.8.1.1 provides some examples. Bolding indicates the relevant lexeme(s). Underlining indicates the second arm of a reduplicated lexeme.

Table 7.8.1.1

W/NW: mj	**mallya <u>leah</u>**	*no*	cf.	SE: fr	**nudy**	*non*
				SE: mj	**pothyack**	*no*
				-: wb	**pōtŷă**	*no*
E: mj	**lyanelé**	*play*	cf.	E: mj	**leenyallé**	*diversion*
E: mj	potha **mallee<u>tyé</u>**	*freestone*				
SE: gar	**novilly**	*no good*	cf.	N: gar	**pood.ya**Creeker.**ne**	*no good*
SE: gar	**ōilŷ**	*bad*		E: gar	**noi.yer.<u>lee</u>**	*no good*
N/E: gar	**car.te.<u>ver</u>**	*bad*		NE: gar	**kar.tee**	*no good*
				SE: jj	**carly**	*bad*
E: gar	**lil.lŷ**.clāp.**pĕr.lăr**	*whaleboat*	cf.	W/NW: mj	**loalybé**	*ship*

When the ostensible transcriptions of vowel clusters are compared with the Robinson and Sterling transcriptions in which stressing and/or accenting is indicated, it enables the statement of a general caveat with respect to the pronunciation of word elements in the form CVV(C). The importance of the caveat cannot be too strongly emphasised. Unless there is other evidence to the contrary, the Robinson and Sterling transcriptions should be treated as transcriptions of separate vowels, and not as transcriptions of either long vowels or diphthongs. This is consistent with Milligan's observation that 'The language ... was rendered embarrassing by the frequent alliteration of the vowels ...'. In other words, transcriptions of **<oo>** and **<ee>** should rarely be treated as single segments articulated as [**u:**] and [**i:**] respectively. The only clear exceptions to the caveat are the Milligan transcriptions of **<oo>** and **<ee>** (§ 7.5.1.3). There are some suspect transcriptions of **<ei>** by Milligan (§ 7.5.1.3). The marked transcriptions of **<oo>** by George Augustus Robinson are virtually invariably in the form **<ōo>**, and in this respect tally with the marked transcriptions of their

Sterling and Walker counterparts. Part A of Table 7.5.2 illustrates the point, and includes transcriptions by other recorders which indicate the transcription of a vowel cluster.

There are only occasional transcriptions of <ee>, including some by Jorgenson. When compared with transcriptions of <ēe> by Sterling, they too appear to constitute geminate vowels. See Part B of Table 7.5.2. The surmise is strengthened by the transcription of counterpart words with vowel clusters, albeit differently composed vowel clusters. Many of these alternative clusters merely evidence lenition of a rhotic or other segment in the alternate set. It will be noted that some of the Sterling transcriptions are themselves alternatès in this respect. In the table, bolding indicates the relevant segments.

Table 7.5.2

Part A

E: gar	goe.gen.ner	*cut*		E: gar	hū.ne.nĕr.pōol.ĕr	*chop*
-: sn	oōngūrlĕrpōolĕr	*cut*				
E: mj	lowgoone	*cut*		W: gar	long.he.lere.re	*cut*
SE: fr	lué	*couper dubois avecun couteau*				
NE: gar	luer.ran.ner	*leg*		NE: gar	loor.ran.ner	*leg*
-: sn	lūrerĕnĕr	*leg*		-: gar	loo.er.run.er	*leg/shin*
NE: cr	lu.run.er	*calf/leg*		SE: rb	leurina	*leg*
-: wb	lōorĕnnĕh	*leg*		SE: gar	lū.ĕr.rŷ	*leg*
SE: fr	lurè	*mollet*				
-: sn	nĕbbĕltēethĕnār	*eye*	cf.	-: gar	nib.bel.teether	*eye*
-: sn	tēethānĕr	*excrement*	cf.	-: sn	tyănĕr	*excrement*
				SE: mj	tianah	*faeces*
				E: mj	tianana	*faeces*
				E: gar	ty.er.nar	*faeces*
-: sn	tēeāgūrnānnĕrnĕ	*flatulent*	cf.	E: gar	tee.gun.ner	*flatulent*
				-: sn	tīecārnār	*flatulent*
-: sn	nĕmēēnĕr	*lazy*	cf.	E: gar	nee.moon.nar	*lazy*

§ 7.8.1.2 Diphthongs

The large number of Palawa word elements transcribed in the form CVV(C) at first sight suggests that diphthongs were a feature of Palawa phonology. However, my study of the Palawa lexicons has left me with the very distinct impression that the great preponderance of the vowels articulated were pure vowels, and rarely, if ever diphthongs. The prolixity of vowels ostensibly transcribed arises from one of two facts. Firstly, the strong stress patterns and associated accenting of individual segments in certain contexts (§ 7.9) led to the lenition of consonants in medial and final position. The second vowel ostensibly transcribed in vowel clusters is thus often a lenited form of a rhotic or dorso-velar nasal (§ 7.6.8.1). Secondly, palatalisation and labiovelarization often associated with later dissimilation ostensibly

resulted in the transcrption of vowel clusters when the palatised consonant was treated by the European recorder as two segments, viz as a consonant followed by a vowel (§§ 7.6.7.1 and 7.6.7.2). Schmidt excepted, the phonological developments referred to were not recognised by any of the nineteenth or twentieth-century commentators. Schmidt briefly discusses palatisation and labiovelarization (1952: 108), and specifically refers to transcriptions of **<te>** as an example. He also lists a number of words which he believed incorporated diphthongs (1952: 106 and 136-137), and as a result of the ambiguities already referred to and discussed further below, I have not attempted any reassessment of these words. Crowley and Dixon do not discuss diphthongs at all (1981: § 2.3). Nor do any of the European recorders allude to the distinction between pure vowels and diphthongs, or identify diphthongs, nor in any other way discuss diphthongs as such.

Milligan, in his comments on the spelling conventions used by him (§ 7.5.1.3), would appear to have identified several diphthongs. These were **<é>** pronounced as in English *day*, a diphthong also ostensibly identified by the French explorers and transcribed in the forms **<é>** and **<ai>** (Plomley 1972: 13); **<ou>** pronounced as in English *noun;* **<oi>** pronounced as in English *toil;* and some different transcriptions of what appear to be the same diphthong; firstly **<i>** pronounced as in English *sigh, riot* etc., and secondly **<ei>** pronounced as in German *Leipsic*. With respect to **<é>**, the great majority of the Milligan and French transcriptions of segments in this form are in word-final position. Importantly, an examination of apparent cognates reveals very few words in which the transcriptions of vowels in word-final position correspond. The examples provided in Part A of Table 7.8.1.2 are typical in this respect. Thus, whilst most of the Milligan and French words for *nails* (*Wordlist*: 98-99) do correspond, they do not do so in all cases, and their transcriptions do not correspond at all with the transcriptions of words for *nails* by other recorders. There are few corresponding Milligan and French transcriptions of words for *lips* (p.109). When it is appreciated that Robinson was the administrator at Bruny Island, and that most French contacts with the Palawa were with (south) Eastern speakers, surprisingly few French and Robinson apparent cognates have been identified. With the possible exception of some words for *stone* (p.411), there are no segments in word-final position which correspond. In other words, the apparent transcription of diphthongs may often be an illusion, and merely exceptions which 'prove the rule' in the huge variability which pervaded the articulation of Palawa vowels. That variability supports a surmise that Palawa vowels were less often, rather than more often, contrastive (§ 7.8.4), as do the opening comments in this subsection on phonological change in the Palawa languages. Part B of Table 7.8.1.2 provides some comparable words in which the ostensible transcriptions of diphthongs reveals a similar picture.

In the table, bolding indicates the relevant segments. In Part A the left hand column lists Milligan and French transcriptions of words which agree with respect to the articulation of the relevant segments; the right hand column lists apparent cognates which denote variations in the articulation of the corresponding segments when transcribed by other recorders. In Part B the left hand column lists Milligan transcriptions of vowel clusters and/or diphthongs; the right hand column lists apparent cognates in which other recorders have recorded a number of variants.

Table 7.8.1.2

Part A

SE: fr	péré lia	*ongles des pieds*	cf.	SE: fr	poneelea	*toenails*
SE: fr	perai lea	*nails of fingers*				
E: mj	pounyé	*finger nail*				
SE: fr	mogudé lia	*lèvres*	cf.	SE: br	moidee	*lips*
SE: fr	mogudai lia	*lèvres*		-: wb	mōnēh	*lips*
SE: mj	moyé	*lips*		E: mj	mounah	*lips*
SE: fr	mallaué	*ocre*	cf.	SE: gar	lye.er.re	*red ochre*
SE: fr	maloué	*terre rouge dont pommenarderisent leur cheveux*		SE: gar	lī.rēe	*red ochre*
SE: fr	loïné	*pierre*	cf.	SE: mj	loinah	*stone*
SE: fr	loïnai	*stone*		SE: fr	loïni	*roche*
SE: mj	loiné	*stone*		SE: gar	loinne	*stone*
				SE: gar	lōin.yĕ	*stone*
				W: cu	lōne	*stone*

Part B

SE: mj	teigna	*thigh*	cf.	E: cr	ter.ner	*thigh*
				SE: gar	tur	*thigh*
				SE: br	ta^{1}e^{2}	*thigh*
				SE: mj	tughrah	*thigh*
E: mj	neingheta	*face*	cf.	E: cr	ning.er.tar	*cheek*
				E: gar	nune.he.nar	*face*
E: mj	parrawureigunepa	*desist*	cf.	SE: mj	parrawé	*cease / abstain*
				SE: mj	parawuree	*desist*
SE: mj	noilee *acid taste*		cf.	SE: gar	ōilỹ	*bad*
SE: mj	noile *sour*			SE: gar	novilly	*no good*
SE: mj	noile *bad no good*			E: gar	no.i.yer.lee	*no good*
				SE: mj	noailee nuggabah	*ugly*
				SE: mj	nuyeko	*wrong*
E: mj	rouninna	*grass*	cf.	E: jj	roonina	*grass*
				E: sc	rawinuina	*grass*
SE: mj	louna	*stone*	cf.	SE: fr	loïné	*pierre*
				SE: mj	loinah	*stone*

§ 7.8.2 Long and Short Vowels

The statements made by Milligan and Walker with respect to the spelling conventions adopted by them (§§ 7.5.1.3 and 7.5.2), coupled with the ostensible transcription of single vowels interposed between consonants as segments in word elements, provide ample evidence as to the articulation of sounds which approximated to the pure vowels articulated in both the Indo-European and Pama-Nyungan languages. Inasmuch as stressing and accenting were features of the Palawa languages (§ 7.9), as were palatalisation and labiovelarization (§§ 7.6.7.1 and 7.6.7.2), it can also be inferred that most of the vowels articulated varied in their length. Schmidt (1952: 104-106), and Crowley and Dixon (1981: § 2.3) asserted that there were both long and short vowels, Schmidt reserving his opinion in the case of [e:] (1952: 134). Schmidt also tentatively identified the presence of the fluted [ɯ̈] (1952: 135-136) identified by Milligan (§ 7.5.1.3), whilst Crowley and Dixon express reservations (1952: 104-105; 1891 412). However, none of them propose any criteria for identifying the length of vowels and, the evidence provided by diacritcs (§ 7.3.3) to one side, only Milligan used spelling conventions which so served. Even then the only long vowels distinguished by him were **[i:]** and **[o:]** (§ 7.5.1.3). It is not implausible to suggest that the loss of the rhotic in word elements in the form CVrC resulted in the lengthening of the preceding vowel, and that the lengthening can be recognised as vestigial of the lost rhotic. Crowley and Dixon suggest that long and short vowels were not contrastive, and I have not identified any evidence to the contrary. It seems clear that transcriptions of **<é>**, (limited to French transcriptions) **<ai>**, **<ah>** and (possibly) **<eh>** all record vowel articulations which exceeded one mora in length.

Table 7.8.2 lists a number of comparable words. In the table, bolding indicates the relevant segments. The left hand column lists words with word elements in which a rhotic was preserved, and the right column words in which there has been lenition and eclipsis of the rhotic.

Table 7.8.2

W/NW gar	**parn**.nic.er	*water*	cf.	E: gar	poe.ken.ner	*rain*
W/NW gar	**par**.niCreeker	*water*		E: bd	pha.ca.nah	*rain*
				W: cr	pa.the.ver	*wet*
N: gar	**par**.can.ner	*sea*	cf.	SE: mj	**pa**namuna	*sea*
Bunganditj	**parr**ik	*water*		Bunganditj	**ping**kum	*water*
Warrnambool	**parriy**t	*water*		Woiwurrung	**baan**^{y}	*water*
				Woiwurrung	**bunggun**^{y}	*waterhole*
				Woiwurrung	**band**ing	*waterhole*
				Sydney	**ban**gala	*watercarrying vessel*

Table 7.8.2 continues

Par.mone.er	Inglis River
Moor.ron.noe	South Esk River
Barrwang	trib. of Werribee River (VIC.)
Murrumbiggee	Murray River (VIC.)
Woiwurrung	ban^{y}min *rain*
Pane.run.ner	Henty River
Mangana Lienta	South Esk River
Bang.en.er Menanyer	Kenmere Rivulet
Painkalac	Painkalac Creek (VIC.)
Mondellimin	locality (Murray River) (VIC.).

A case can also be made for the articulation of a 'long' vowel when followed in the same word element by a voiced stop, by **<m>**, by **<ng>**, or by **<r^{r}>**. As a corollary, it is suggested that a vowel when followed in the same word element by an unvoiced stop was probably 'short'. Similarly, in transcriptions of CVV(C), the marking of the first vowel with a bar suggests a 'long' vowel, and marking by '˘' suggests a 'short' vowel. However, the surmises are in part to be linked with phonological changes and morphological matters beyond the scope of the present thesis, and they will not be further pursued. Transcriptions of **<ck>** were discussed in § 7.6.3.1. It was suggested there that the transcriptions denoted the accenting of an unvoiced dorso-velar stop, and thus a probability that the preceding vowel was a short vowel.

§ 7.8.3 Schwa

Crowley and Dixon excepted (1981: 412-413), no commentators on the Palawa languages ever explored the possibility that a number of transcriptions recorded neutral vowels of the type referred to as 'sheva' or 'schwa'. Whether or not the examples provided by them are valid examples, their surmise as to the reduction of various vowels to a central vowel is acceptable. None of the European recorders made any reference to neutral vowels, and that the Robinsons, Sterling and Walker recognised schwa is a matter of inference based on their transcriptions of <er>, <ĕr> and < ĕh>. These transcriptions appear in medial and final word elements in numerous words which when transcribed by others would appear to have been transcribed as **<a>**. In the early nineteenth century, as well as today, unstressed mid-vowels were typically transcribed as **<er>** (Crystal 1995: 255). The surmise is also based on the fact that the Robinsons regularly transcribed <a> as a final segment in other word elements, presumably in such cases distinguishing the sound identified from schwa. The Robinsons and Sterling were more perceptive with respect to the articulation of Palawa sounds than all the other major recorders, and in particular sounds of one mora or less in length. Accordingly, it is plausible to assume that many transcriptions by other recorders of <a> in final position were in fact transcriptions of schwa. Very weakly, the surmise is indirectly supported by Milligan's reference to 'affixes, which signify nothing' (Plomley 1976: 30), and more

strongly by the fact that Milligan, Backhouse and some others transcribed <ah> and <eh> to indicate what was either a long vowel, or possibly a vowel with 'colour' (§§ 7.5.1.3, 7.5.2 and 7.8.2). Walker transcribed both **<ĕh>** and **<ēh>** in word-final position which suggests that he used the former not only to denote an unaccented vowel, but also a neutral vowel. That one or more forms of reduced vowels were articulated is consistent with the heavy stressing of word elements in many Palawa words (§ 7.9), and the frequent eclipsis of initial consonants in following word elements (§ 7.6.8).

Transcriptions of <ing>, <eng>, and <ung> by the French explorers, Milligan and Jorgenson to transcribe the dorso-velar nasal in initial position suggests the auditory perception of a muted and indistinct sound which was interpreted as a vowel. Transcriptions of this type were discussed in § 7.6.1.1, and examples were provided in its accompanying table. This suggests that even in their mother tongue many of the European recorders were insensitive to schwa, identifying it as an unaccented vowel for which they had no appropriate symbol. If so, this would further support an interpretation of their transcriptions of [**a**] in word-final position as schwa. The reality of transcriptions in the forms **<ing>**, **<eng>**, and **<ung>** is that the dorso-velar nasal in word-initial position was unfamiliar to the Europeans, and variations in its articulation by the Palawa would have exacerbated their difficulties. The transcription of an initial vowel in these transcriptions can be compared with the apostrophe used by Milligan in **<'ng>** as an initial segment, and medially at syllabic boundaries by Sterling (§ 7.3.2).

The other possible major form of schwa is analogous in its genesis. The reference is to **<e>** and sometimes other 'vowels' as a final segment in ostensibly disyllabic word elements in the form CVCe (§ 7.3.1). It is plausible to treat the incorporation of **<e>** etc. in such transcriptions as a method of recording a hiatus. However, it is not unlikely that articulations of this type led to anaptyxis. Transcriptions of **<w>** and **<u>** in word elements in the forms CV**w**(C), CV**u**(C) and CV**y** can also be interpreted as forms of schwa, albeit as segments which had their genesis in rhotics, rather than as an excrescence.

Crowley and Dixon do not discuss the transcriptions in the forms <er> and <ĕr> as potentially recording schwa, but treated <er> as the transcription of a reduced vowel in their discussion of <now.hum.**mer**> (1981: 414). With respect to the examples provided on page 413, in the words for *boat* **<i>** as a transription evidences the accenting of the preceding nasal, and not a pronunciation shift which involved the [**e**] transcribed by Backhouse. In apprpriate contexts both **<i>** and **<e>** may in fact evidence anaptyxis. That this is so is evidenced by the Robinson word (incorrectly attributed by Crowley and Dixon to Sterling) and Sterling's transcription of <ĕr> in the next word listed by Plomley (*Wordlist*: 108). Words such as <lucrapen**y**> in the same list may evidence the development through dissimilation of the accented consonant as a

preliminary step leading to anaptyxis. The words for *neck* illustrate accenting of [**l**] as a consonant in final position. With respect to the words for *heel,* the analysis is flawed. The other words for *heel* listed under subheading <to.ken.ner> (*Wordlist*: 97) clearly evidence the presence of a second word element with secondary stressing. In other words, in <tokana> the bolded segment records [**a**], and not schwa. Robinson's <touger> evidences attrition of the words in their earlier form to a shortened variant. In this variant <**er**> can be interpreted as an unaccented mid vowel, but is better interpreted as a form of schwa.

§ 7.8.4 Vowels as Phonemes

The foregoing remarks are relevant to a consideration of the contexts in which the ostensible transcription of vowels can be identified as vowels, and not as for example as semi-vowels. They are also relevant with respect to the contexts in which vowels were contrasted with each other. An appreciation of the fact that consonants and semi-vowels in medial and final positions in word elements were allophones of each other, but phonemes in initial position helps explain the immense variability in the articulation of vowels as observed by Milligan, and as regularly recorded by him and the other recorders. The relative stability of consonants and semi-vowels in word-initial position, their greater variability in initial position in following word elements, and their marked instability in medial and final positions in word elements, is reflected in the articulation of vowels. In other words, a vowel in a stressed word element tended to maintain some stability, but a vowel in an unstressed word element tended to be immensely variable. But it cannot as a result be inferred that vowels as individual segments were typically contrastive. At most it can be inferred that vowels in stressed syllables were contrastive. Even that inference has doubtful validity expressed as a general proposition. It was the syllable, and particularly its initial segment, which provided semantic connotations, and the correspondence of the vowels in the transcriptions was probably in most cases co-incidental. As an example, compare the vowels in the first word element in the words for *teeth* listed under subheadings <canan> and <cowwer> in *Wordlist* (p.109) which range through [**a**], [□] or [**o**], and [**u:**]. Compare also the vowels in the first word element in words for *ear* (pp.113-114) listed under subheadings <kowndeyer>, <kuribbemer>, and in the words listed under <vaigui> <cuégui> through to <koy'gee> which have an even wider phonetic range. The safer inference is that the articulation of vowels was more likely to have been affected by stressing, and/or by contiguous consonants, than by semantic considerations.

Crowley and Dixon discuss Palawa vowels at some length (1981: § 2.3). Tentatively at times, and more confidently in other cases, they express a number of opinions. But frankly I am at a

loss to understand how they arrived at most of their surmises, and believe that many of them are mistaken.

They identify three high vowels, viz [i], [ü], and [u]; three mid vowels, viz [e], a sound phonetically represented as schwa, and [o]; and three low vowels, viz [æ], [a], and [ɑ]. They state that there may have been other vowels in respect of which the evidence is ambiguous. Without providing examples or other evidence they state 'We could not distinguish the three low vowels ... from any source but Milligan, and only the French maritime explorers support Milligan's observation concerning [ü].' Dealing firstly with the low vowels, Milligan was a Glaswegian. Accordingly, both his pronunciation of *cat* and *rap* are best phoneticised as /kat/ and /rˈap/. Provisionally accepting that the few transcriptions of <ae> by Milligan, and perhaps occasionally by others (but not by the Robinsons), may record [æ], I have been unable to identify any Milligan transcriptions which distinguish between [a], [ɛ] and [æ] as segments. With respect to [ü], I note that Crowley and Dixon do not state that they were able to identify any Milligan transcriptions which support his observation (1890: 12-13). For my part I am unable to identify either Milligan or French transcriptions which identify [ü]. Without more, it would be naïve to assume that <u> as a French transcription invariably (or for that matter ever) recorded [ü]. Discussions of the palatalised dorso-velar stop in § 7.6.3.1 amply contradict any such assumption as a universal proposition.

After providing some ostensible alternations as examples, Crowleyand Dixon continue (1981: 412):

> This suggests a system of just three vowels, at the phonological level, /a/, /u/ and /i/. It is worth remarking that the most common vowel system on the Australian mainland involves just these three vowels.

My comment is that whilst a teleological search for examples of sets of words that ostensibly support the Crowley Dixon proposition will be successful, it will be at the expense of the inferences to be drawn from a more systematic and less strongly focussed search. In statistical terms, the data only marginally support the proposition. Crowley and Dixon do not refer to the very large number of exceptions. Using the words chosen by Crowley and Dixon to illustrate the point, Table 7.8.4 lists apparent cognates that in nearly every case provide contrary examples.

In the table, bolding indicates the relevant segments. The words for *muttonfish* (<yawarrenah>and <yowarrenah >) plus two apparent cognates are from Eastern speech, and alone are completely consistent with the proposed Crowley and Dixon alternations. But they are few in number, and can be compared with the words for abalone included in the table. These words are not consistent with the hypothesis. Crowley and Dixon have also incorrectly

equated <ee> with [i:]. But in any event they have not noted words in which the first word element is inconsistent with their hypothesis, nor the words in which the second word element is inconsistent with the words they have chosen.

Table 7.8.4

Crowley and Dixon examples			**Additional Words**		
Alternations [a] with [e]					
-: jj	magog	*rock*	cf. SE: mj	mughra mallee	*topaz*
-: lh	megog	*rock*			
SE: mj	nubré	*eye*	cf. SE: gar	nūe.bĕr.răe	*eye*
SE: br	nubrana	*eye*	SE: fr	nubru nubéré	*yeux*
Alternations [a] with [o]					
-: jj	bacala	*bullock*	cf. W: jj	buckalow	*bullock*
E: bd	po.co.la	*bullock*	W: jj	benkelow	*bullock*
			E: cr	mucker.tine.yer	*large white mutton fish*
			E: mj	magrannyah	*smooth mutton fish*
			E: mj	magranyah	*H.glabra*
Alternations [u] with [o]					
E: jj	youla	*mutton bird*	cf. -: lh	yavla	*mutton bird*
SE: mj	yolla	*mutton bird*	NE: gar	yalla	*mutton bird*
-: ar	moona	*lips*	cf. SE: fr	mangui lia	*lèvres*
NE: gar	moo.ner	*lips*	NW: gar	men.riCreeker	*lips / mouth*
-: wb	mōnĕh	*lips*			
Alternations [i] with [e]					
-: gar	lee.peen.ne	*eye*	cf. N: gar	lee. pane.ner	*eye*
NE: gar	le.pe.ne	*eye*	NE: cr	lea.pe.ne	*eye*
			-: bk	lehpéhneh	*eye*
E: gar	leen.her	*buttock*	cf. SE: fr	luné	*fesses*
E: gar	leieena	*buttock*	SE: fr	loié loininngé	*fundament*
E: gar	leng.in.ner	*buttock*	E: mj	loa lingana	*vent*
E: mj	liengana	*buttock*			

Crowley and Dixon further state that **/a/** appears as **/o/** most frequently next to labial or dorsal consonants, and as **/e/** most frequently next to laminal or apical consonants. Again I question their assessment of the evidence. It depends for its validity on a number of questionable and, on their part, usually unstated assumptions with respect to the Palawa articulation of the sounds denoted by letters of the alphabet used in English to record vowels and diphthongs. Having regard to the demonstrated variability of Palawa articulations, I believe it impossible in any event to make a sufficient number of reliable assessments to reach any conclusions of this nature. I assume, of course, that Crowley and Dixon are not referring to a narrow majority of words, but to what they believe to be substantial preponderances. A very large number of comparable words are listed in *Wordlist* under *SPEAK* (pp.399-402). They do not support the

Crowley Dixon contention, and the group is typical, and by no means exceptional in this respect.

The question remains whether there are any contexts in which any of the various vowels were contrastive with each other. The answer is almost certainly 'yes'. But I do not think that the question can be adequately responded to at this juncture. Palawa was first spoken some 37 or more millennia ago. A number of Palawa languages developed, probably in complete isolation from mainland Australia during the last glacial (§§ 3.2 and 4.2). Languages later ported to Tasmania by immigrants from mainland Australia would have contributed to their development (§§ 7.1.1.3 and 7.6.3.4 and Table 7.6.3.4). From c10,500 BCE, Bass Strait put a permanent barrier in place. There is no doubt that as in the Indo-European and Pama-Nyungan languages, lexical affixes became a means of conveying semantic information, particularly when incorporated in compound words. The reflexes of *lia and *lar are examples (§ 7.1.1.3). Apparent cognates of<timy> appear in a number of Milligan words in which the sense of something lacking is conveyed (Table 7.5.1.3(b)). Further examples are provided by the suffixes in Palawa words which performed the role of verbs, and conveyed the general ideas of *action* and *perfection / completion* (Schmidt 1952: 229). Developments of these types suggest that the 'conventionalism' of words and other lexemes had commenced in the Palawa languages, perhaps as the result of the post 15,000 BCE migrations, and that it had leap-frogged the development of individual vowels as phonemes vis-a-vis other vowels. But further consideration of the surmise must await an exposition of the semantic changes that occurred in the Palawa languages.

As the foregoing remarks imply, one cannot maintain that in Palawa vowels were never contrastive. Comparative analysis reveals that in clan names a clearly recognisable vowel cluster was incorporated by Mara speakers in word elements to indicate that the word identified was a clan name. The word element fits templates in the forms (**mair**) and (**pair**), and the diphthong or vowel cluster transcribed were so regularly transcribed as **<ai>** in this context as to be undoubtedly contrastive. Furthermore, metathesis carried the contrast through to the pronunciation of the same diphthong or vowel cluster in other word elements. Thus in *Lair.brn.hurn.me* (Plomley 1992, clan 30), the first two elements are a locative classifier which referred to the Huon River, and in *Lair.mair.re.ner Pair.re.ner* (clan 43) the same phenomenon is present even though one can only speculate as to the connotations of the first word as a locative classifier. Likewise, the [a] in reflexes of *lia and *lar (§ 7.1.1.3) is ubiquitous, and arguably contrastive.

§ 7.9 Stress and Accenting

Dixon states (1980: § 6.1: 128 and 129).

> In the south eastern Australian languages the initial syllable is generally stressed. There is usually a cadence in which beginning with the first syllable every alternative syllable is stressed with the exception of the final syllable

The first sentence in this citation applies to Palawa words, but not the second. Neither Dixon nor Hock discuss the function of stressing, but the stressing of one or more syllables in multisyllabic words at the expense of another or other syllables is a common feature cross-linguistically, and must have been a feature of proto Australian (§ 7.6.8). It has been surmised that its original function was to aid word pre-recognition (Deacon 1988), and it continued to perform this function in the nineteenth-century Palawa languages. Deacon is a palaeontologist who has made a close study of the evolution in hominids of the human vocal tract; the muscles which control the tongue, the lips and the epiglottis; and in association with these physical features of the ganglions of nerves which connect the muscles with the cortex. It is his general thesis that hominid survival was enhanced by those physical, mental, and linguistic developments which aided the speedy comprehension by listeners of the utterances of speakers. Comprehension was aided by repetition, particularly during early hominid prehistory before the development of a human vocal tract from a vocal tract essentially similar to the present vocal tracts of the great apes (Deacon 1988). A particular hypothesis advanced by Deacon is that the repetition is likely to have been synaptic at one stage, and thus involuntary. As will be discussed (§ 7.9), Palawa stressing and accenting is also conducive to word pre recognition, and more indirectly it enables the contraction of words, thus indirectly speeding human communication.

In both Pama-Nyungan and Palawa the initial segment was usually unvoiced, and in consequence not as distinctly accented as when voiced. This lack of voicing may in part have been attributable to the deactivating of the vocal chords in connection with the closing-off of words, and a correlative timing need to again re-activate the chords with the utterance of a new word (Hock 1991: 14 and 640). But in any event, the semantic need for the first segment to be distinctly heard (§ 7.1.1.3) encouraged the stressing of the first limb, and compensated for any lack of comprehension otherwise involved. Accordingly, the stress system in Palawa was significantly different from the typical stress patterns of Pama-Nyungan as described by Dixon.

Crowley and Dixon discussed the stressing of Palawa words in the following terms (1981: 413):

> The position of stress within a word is perhaps the most elusive aspect of Tasmanian phonology.

> Walker marks each vowel with either ¯ or ˘; these marks apparently indicate accent rather than quantity (see the comment in Roth, p.1 of Appendix)
> ....
> Our only general conclusion concerning stress in Tasmanian is thus; any syllable except the last can bear stress.

I am unable to agree with any of these observations, and in fact find them perplexing. Crowley and Dixon used the second edition of Roth. There is no single appendix in this edition, and with reference to the Palawa languages there are seven appendices. Roman numerals are used to paginate the appendices. Roth's comment appears on page 'l' of Appendix E, not page 1 of the 'appendix'. Walker explicitly states 'The *syllables* marked with a long line above are those on which emphasis should be placed' (1902: 255 – my italics). The term 'accent' in Roth's paraphrasing of Walker's remarks was not used in its modern, more limited and technical sense, but in its nineteenth-century sense which indicated as well as the stressing of syllables, the accenting of segments (Onions 1966: 7); a fact made clear by the reference to 'quantity' in the phrase which follows in Roth. The same diacritics were adopted by all the European recorders, who used these marks. Sterling and Walker used the diacritics in their transcriptions. Cunningham did so most of the time, and M'Geary, Backhouse and Milligan albeit only occasionally. George Augustus Robinson so marked a large number of words. The vowels so marked are to be compared with the use of diacritic '˘' placed over semi-vowels as well as vowels. Comparative analysis makes clear the fact that the bar as a diacritic indicated stressing and/or accenting, and the other diacritic a lack of stressing or accenting.

A full exposition of stressing and accenting must await a description of Palawa morphology, and in particular the Palawa use of reduplicated and doubly reduplicated words. Nevertheless in 99 per cent of word elements in initial position with vowels bearing these diacritics, the first vowel is marked with a bar, and just as invariably a syllable in one or more of the remaining word elements is marked with '˘'. Ostensibly, Robinson's regular marking of <**y**> in initial word elements in the forms <**py**>, <**by**>, <**dy**>, <**ty**> and <**ny**> with the same diacritic over the <**y**> provides an exception. But typically these transcriptions transcribe not a consonant cluster, but a single segment, viz a palatised bilabial stop, a palatised alveolar stop or a palatised alveolar nasal (§ 7.6.7.1). The phenomenon described is thus completely consistent with strong stressing of the first word element in words. Notwithstanding Roth's reference to 'quantity' in his paraphrasing of Walker's note, the diacritics thus also provide information with respect to the length of vowels. It is implausible to suggest that a pure vowel in a syllable marked with a diacritic bar did not have more mora than an unmarked vowel in a following word element, and in particular a vowel in a following word element marked with the other diacritic. Examples of words for water and water features, including some south

eastern Australian words, were provided in § 7.8.2. Table 7.9 provides further examples which illustrate the points made.

In the following table, bolding indicates the relevant segments lexeme(s). The right hand column lists words which illustrate the variations (possible alternations) which affected the transcription of apparent cognates.

Table 7.9

E: gar	hān.nĕ.min.ner	*hand*	cf.	-: wb	ānnĕh mīnnĕh	*hand*
?: sn	pārlĕrtĕrmīnnĕr	*hand*		- : sn	pēecārkĕrlĕmārner	*head*
?: wb	mīnnĕrrĕhwārrĕh	*nose*		SE: gar	mūe.gīn.nĕ	*nostrils*
?: sn	pĭ—crăckĕmĕr	*head*				
SE: gar	**bў.dāy**	*head*		SE: gar	rōw.gēe	*forehead*
SE: gar	**mō.gēe**	*mouth*		-: sn	mōkĕr lōobrĕr	*mouth*

§ 7.10 Voicing

Generally speaking, in most of the south eastern Pama-Nyungan languages voiced and unvoiced consonants are not contrastive (Crowley and Dixon 1981: 408). Schmidt also believed that voicing was not contrastive in the Palawa languages (1952: 106-108), a view endorsed by Crowley and Dixon (1981: 408). Nevertheless, there is some evidence of a contrast between voiced and unvoiced dorso-velar stops in word-initial position in (south) Western speech, a matter which involved a semantic change, and which therefore will not be pursued in this thesis. Very arguably, voiced post-alveolar fricatives were at times contrasted with their unvoiced counterparts. But the issue here is confused by the onomatopoeic overtones involved in the articulation of voiced post-alveolar fricatives (§ 7.6.4.1). In other words the accenting of an alveolar stop in word-initial position would have provided emphasis, and the imparted emphasis may have altered the articulation of the stop to a fricative. A later decrease in the accenting of the fricative would have led to [t^{r}] as its unvoiced counterpart. That decrease could have been concomitant with a change in the connotations of the word, but in this respect is merely co-incidental. There would have been no conscious attempt to distinguish for semantic purposes those words with the voiced fricative in word-initial position from those with the unvoiced fricative in word-initial position. Certainly other fricatives as well as post-alveolar fricatives were frequently contrasted with alveolar stops, and in a number of apparent cognates the stops present as lenited forms of the fricative (§§ 7.6.4.2 and 7.6.4.4). The subject will not be further pursued in this thesis.

More tentatively, Crowley and Dixon also endorse Schmidt's observations that stops are almost always voiceless at the beginning of Palawa words (1981: 408). This observation is obviously correct, and readily confirmed by word counts. Thus the great majority of Palawa place names with bilabial stops in word-initial position are headed by [**p**] (*Place Names*: 49-63), and there are only 11 headed by [**b**] (pp.5-6). Crowley and Dixon also tentatively endorse what they state is another Schmidt observation, viz that a stop between the first and second vowels of a word is likely to be voiced if the word begins with a consonant cluster which includes a rhotic as its second member, or with any of **<r>**, **<l>**, **<m>**, **<n>**, or **<w>**. I do not read Schmidt in this way, and in my view his comments are a reference to the not untypical voicing of the initial segment in the word elements which follow the first word element in words so headed. Furthermore, I believe that the phenomena referred to are not always the product of pronunciation shifts, but in many cases the product of semantic changes involving the first segment in word elements. See below.

Contrasting to one side, the voicing of consonants is a cross-linguistic phenomenon. The voicing or non-voicing of consonants in particular contexts can be explained in a number of different ways (Hock 1991: 14; 80; 640), and the factors involved in particular cases are not always clear. Relaxation of vocalic effort, and in consequence of the vocal chords is one such explanation (Hock 1991: 80). This typically occurs at the end of words, and in consequence can carry over into the articulation of the initial segment in a following word. As suggested by Hock, such a phenomenon adequately explains the great preponderance of unvoiced consonants in word-initial position. Paradoxically, relaxation of vocalic effort may also explain the intervocalic voicing of some consonants in intial position in following word elements (Hock 1991: 80), the point being that there has been no time for the vocal chords to relax.

Nevertheless, in Palawa voicing would also appear to have been associated with the stressing of word elements. In § 7.9 it was suggested that the preservation of a rhotic or a dorso-velar nasal as the final segment in a word element can evidence stressing. In the 11 Palawa place names with [**b**] in word-initial position (*Place Names*: 5-6), two preserve [**ŋ**] as the final segment in the first word element, three preserve [**r**^{r}], three a lenited form of a rhotic, and one a lenited form of the dorso-velar nasal. Secondary stressing of the initial segment in a following word element was more likely if the initial segment had a semantic role, and whilst the point cannot be pursued in this thesis, it is to be noted that the phonological progression from a bilabial stop to [**m**] and [**v**] involved [**b**], not [**p**] (§§ 7.6.8 to 7.6.8.3).

There are some other explanations. Disyllabic words usually evidence the loss of one or more word elements. In such cases the contraction of the word would appear to have typically led

to an increase in the stressing of the final, as well as the initial, word element. In other cases degemination was a factor. A number of words which incorporate transcriptions of <**th**> have apparent cognates in which the corresponding segment is transcribed as <**d**>. If the <**th**> denotes a voiced laminal interdental, then both transcriptions may evidence degemmination, or some other form of cluster simplification. But as suggested by Hock (1991: 80), the aspiration and voicing of stops may be associated phenomena. See Part A of Table 7.10 for some examples.

Whilst [**n**] in final position usually evidences the lenition of [**ŋ**] (§ 7.6.8.1), it was replaced by [**m**] in at least two contexts, presumably because phonologically [**n**] when heavily accented, sometimes shifted to [**m**]. Anticipatory assimilation of voicing occurred when the first segment in a following element was voiced, and in such cases sometimes produced the substitution, a phenomenon recognised cross linguistically. See Part B of Table 7.10 for some examples. Accenting and/or voicing were used to denote the end of a word. In such cases [**m**] sometimes replaced [**n**] as the segment in word-final position (§ 7.6.8.1). Similar comments apply to the articulation of [**g**] in word-final position. Part C provides examples. See also the discussion in § 7.6.2.2 of transcriptions of <ll> in medial position, and the examples provided in its accompanying table. Many words in the Nara languages, and a few in Eastern speech, evidence the reverse process. Comparative analysis indicates that many words which originally had [**m**] in word-initial position evidence a pronunciation shift to [**n**]. Part D provides examples.

In Table 7.10, bolding indicates the relevant segments, and **ø** indicates the loss of a relevant segment.

Table 7.10

Part A

SE: gar	mut.tin.ner	*testicles*	cf.	SE: gar	muth.her	*testicles*
SE: mj	matta	*scrotum / testes*		SE: fr	mada	*couille / testicules.*
W: cr	tar.la.tith.i**Creekker***go*		cf.	SE: ck	toga'rago	*I must be gone / I will go*
				N: jd	haku - tettiga	*go home*
SE: mj	tabba	*ham / hough*	cf.	SE: mj	tapmita	*hamstring*
SE: mj	leippetah	*Larus pacificus*	cf.	SE: gar	lūe.bāy.dŷ	*gull*

Part B

E: gar	han.ne**m**.been.er	*wrist*	N: gm	(ø)o**mb**lera	*cou*
N: Cr	co**m**.ba	*heart*	SE: mj	murru**mb**ukannya	*fairy*

Table 7.10 Part B continues

-: gar	mam.din.ner	*mother*	W: gar	nim.de.ber	*husband*
W/NW: mj	polimganoanaté	*fragrant*			

Part C

E: mj	rogounim lienya	*forehead*			
	Rar.ner.wim	The Doughboys	*Roeinrim*		Mt.Heemskirk
	Wong.en.drum	Dodgers Point	*Wong.ger.rim*		Two Mile Sand
SE: gar	touger	*heel*	cf. NE: gar	to.ker	*heel*
-: jj	magog	*rock*	cf. SE: jj	keeka	*crystal*
-: gar	mug	*urine*	cf. NW" JJ	moka	*fresh water*

Part D

SE: gar	mir.re.mal.ler.ge	*white quartz*	cf. E: gar	narng.em.ner	*rock*
SE: mj	mughra mallee	*topaz*	cf. -: sn	nōēenār	*stone*
SE: fr	miré	*espece de jonc*	cf. NW: garnare.rer		*grass*
NW:jj	myria	*grass*	cf. E: gar	nin.neen.er	*long cutting grass*
SE: mj	marah	*five*	cf. NW: garnor.ne		*five*

§ 7.11 Tone

There can be little doubt that tone played a semantic role in the Palawa languages. Examples are provided in Part A of Table 7.11. But there is no evidence of the use of tone as a systematic contrasting semantic device, as in the Sino-Tibetan languages. It is therefore inferred that the Palawa use of tone differed little from its use in English. In other words, tone would have indicated a speaker's mood, but was rarely capable of transcription by the European recorder. It is in fact not implausible to suggest that like gestures and body language, tone had a somewhat greater role than it it does in modern Indo-European languages. A number of words were probably onomatopoeic (cf. Hock 1991: 50). Thus it seems likely that -: sn <wōrb> = *pain* had a connection with <werr>, a stressed exclamation which expressed anger and other forms of excitement (*Wordlist*: 28). Likewise, the words listed in Part B of Table 7.11 present as words with onomatopoeic overtones. Arguably many words headed by the post-alveolar stop [**d^{r}/t^{r}**] had an onomatopoeic quality (§ 7.6.3.4). Underlining indicates the second arm of a doubly reduplicated word. In Table 7.11, bolding indicates the segments to be considered.

Table 7.11

Part A

E: mj	ah	*ah!*	W/NW:	mj yah!	*greeting*
E: mj	yah! tahwattya!	*greeting*	E: cr	warl.i.pare	*war whoop*

Table 7.11 continues
Part B

-:gar	wrag.ge.o.wrapper	*devil*	cf.	SE: gar	rāe.gĕ.ŏ.wrōppĕr	*devil / evil spirit*
E: cr	dric.wer.row.wenner	*devil*		E: mj	wurrawena	*spirit of dead*

S 7.12 Summation

It is appropriate in concluding, to provide overall assessments of the two major descriptions of the Palawa languages, insofar as they discuss the phonology of the Palawa languages, and to provide a summary of the conclusions which can be stated at this stage with respect to Palawa phonology.

S 7.12.1 Earlier Studies

By far the most comprehensive study of the Palawa languages undertaken to date has been that of Wilhelm Schmidt (§ 6.4.3). Schmidt's description was prepared at a time when studies of the Australian Aboriginal languages were in their infancy, including studies of their phonetics and phonologies. It was also undertaken with only one third of the Palawa materials now available. One can only share with Capell (1968: 1) an immense admiration at what he was able to achieve with those materials. But the fact remains that the absence of the materials now available, particularly the now much more extensive lexicons of Western and South Western speech, and place names and clan names, deprived him of important insights. He also brought mindsets with him as a result of his knowledge of both classical and modern Indo-European languages. These affected both the path of his investigations and ultimately a number of his conclusions. He published his work in German (1952), and whilst it is believed that his work has been translated, the translation has not been found (ATSIC Library 2002 pers.com.). His terminology is by today's criteria archaic in a number of respects. These matters mean that little attention has been paid to his work, and that his conclusions are not widely known. He was aware (1952: 20-24) of Milligan's observations (§ 7.5.1), and he diligently endeavoured to match word transcriptions with each of the sounds referred to by Milligan. As a result he identified the fluted [ɪ́] noted by Milligan (1952: 136) by relating it to certain types of transcriptions. But he was unaware of the fact that none of the other recorders including Jorgenson as a Dane, the French explorers, and Gaimard identified such a sound (§ 7.5.1.3). In other words the more basic question is whether [ɪ́] was ever regularly articulated by Palawa speakers, or when articulated merely an occasional and aberrant pronunciation which Milligan identified as a distinct and unique segment. Until its regular articulation can be established by other means, in itself an unlikely proposition, Schmidt's identifications have little value except as a hypothetical exercise. But Schmidt did identify the

palatalisation and labiovelarization of consonants (1952: p.108; § 7.6.7.1), phenomena identified by no others. He never mastered the stressing and accenting systems (1952: 118-121). Some of his most important research was into matters such as the semantic content of words and the presence or absence of grammatical affixes, matters which are ouside the ambit of the present thesis. It is neither unfair to Schmidt, nor derogatory of his work, to state that his research into phonetic and phonological matters is now of historical interest only.

The much better known study is that of Crowley and Dixon (1981). Earlier some comparisons of Palawa with Pama-Nyungan by Dixon in his major work on the Australian languages (1980), led to a number of general observations by him. These have been discussed in appropriate places in this chapter, and include the fact that at a phonological level the two language phyla have remarkably similar systems; the further fact that unlike Pama-Nyungan, a large number of Palawa words have liquids in word-initial position; and that there would appear to have been an unduly large number of vowels.

The later and more comprehensive Crowley and Dixon study is, on investigation, very disappointing. Dixon's observations were not followed up, and thus remained unverified and/or unexplained. Assumptions with respect to the spelling conventions used to transcribe Palawa words were obviously made, but only rarely stated and/or discussed. Thus it was assumed, but not stated, that transcriptions of <r> by the Robinsons in word elements in the form CVr(C) were merely a spelling device that denoted that the preceding segment was a long vowel (§ 7.6.2.4). Comparison with cognate words transcribed by Jorgenson, a Dane, the French maritime explorers and Gaimard, a French scientist, and with those English speakers who were Scotsmen, clearly reveal that the Robinson transcriptions of <r> denote the articulation of a rhotic, and arguably usually a tapped rhotic (§ 7.6.2.1.2). The only exception is the use of <er> as a digraph to denote schwa. The assumption that in transcriptions in the form CVr(C), the <r> was a spelling device, and silent, would appear to have been applied by them implausibly to the transcriptions of all the other recorders. Significant evidence for their belief in this respect, is provided by their statement, that there is 'no evidence ... for any retroflex sounds' (1981: 410). There is in fact an abundance of such evidence (§ 7.6.2.4).

Surprisingly no attempt was made by Crowley and Dixon to use the principles of historical linguistics to verify the ostensible purport of transcribed segments, nor as a check on their own inferences. Thus the possibility that many bilabial and dorso-velar stops had been palatalised and labiovelarised was not addressed. Much of their thinking would appear to have been guided by their understanding of Pama-Nyungan phonology, and as a result, for example, they failed to detect the presence of a post-alveolar fricative (§ 7.6.4.3), a glottal [h] (§ 7.6.5), and interpreted <v> as merely an aspirated alternation of <w> (§ 7.6.4.2). This

without exploring other not only plausible, but cross- linguistically well recognised possibilities. In many words further comparison of cognates listed on the same, or a following, page in *Wordlist* would have revealed that for example, <**v**> and <**b**> in medial positions were members of a set of allophones, which as a set were contrastive with other segments, but never within the set, contrastive with each other (§§ 7.6.3.2 and 7.6.8).

The Crowley and Dixon study is disappointing in a number of other important respects, and at times misleading. Understandably, but mistakenly, they adopted without investigation, as did Ryan (§ 5.4.2 and following), Jones's surmise that at its highest level the Palawa socio-economic form of organisation was that of the 'tribe', using that term in its modern anthropological sense (§ 5.4.2). As a resultthey not unreasonably, but erroneously assumed that there were a number of Palawa languages that could be matched with particular Palawa 'tribes' (1981: § 1.4), and based a number of inferences on the surmise. This reduces the value of their tables of vocabulary comparisons (1981: 402 and 403), as does the fact that the data used to compile the tables has not been provided by them, or otherwise identified. They made no attempt to discuss relevant semantic developments. Indeed their assertion that the few apparent cognates of mainland words are likely to have been coincidences (1981: § 4) reveals that they were relying on the surmises of others, and that no independent investigation of this aspect could possibly have been undertaken by them (cf. § 4.4; Table 4.4; § 7.1.1.4; Table 7.4.2(b); Table 7.6.2.1.2(c); Table 7.6.2.2(a); Table 7.6.3.4(a); Table 7.6.8.1; Table 7.6.8.2; § 7.7.2; Table 7.7.2(a); Table 7.7.2(b); Table 7.8.2; and the Table of apparent Palawa cognates in the Pallangamiddang vocabulary). Their discussion of Palawa syntax indicates no real awareness of Schmidt's work, a comment which applies to most of their other surmises. Overall, it is difficult to see how they have in any material way advanced our knowledge of Palawa phonetics and phonologies beyond Dixon's useful, but very general earlier observations. At best they have made available to a wider public some knowledge of some of the features of Palawa phonology, but with it, a great deal of misleading information.

S 7.12.2 Palawa Phonetics and Phonologies

Chapter 7 makes clear the conclusion that in the absence of audiological recordings it is impossible to determine the pronunciation of a number of segments in a large number of Palawa words. There is no single reason for this. Milligan commented on the thoroughly disconcerting nature of the variations in the articulation of words by the Palawa themselves (1890: 9-13). The transcriptions of the other recorders strongly support his observation. A major reason for these variations was the fact that single segments were not, as they generally are in the Indo-European and Pama-Nyungan, distinct phonemes in all positions (§§ 7.6.2.1.2,

7.6.2.1.3, 7.6.2.2, 7.6.5, 7.6.6 etc.). Most consonants and the semi-vowels were contrastive in word-initial position, tended to be contrastive as the initial segment in following word elements, but were only rarely contrastive in other medial positions, and almost never in final position. The discussion of the bilabial nasals provides an example (§ 7.6.1.5). Even when in initial position, segments which are contrastive in the Indo-European and Pama-Nyungan languages were not always uniquely contrastive, and were instead at times members of a set of segments which as a set was contrastive with other segments, but not within its own group. The discussions of the alveolar stops, and their association with various fricatives provide clear examples (§ 7.6.3.6). For persons familiar with the Indo-European languages, a confusing feature is the lack of contrasting afforded by segments which are the product of eclipsis and epenthetic alliteration (§ 7.6.8), and the instability of the liquids when in medial or final position (§ 7.6.2). The immense variation in the articulation of vowels in apparently cognate words is as remarkable as it was unexpected (§ 7.8.4), and strongly supports a general proposition that vowels were not contrasted in most contexts. Semantic analyses and an understanding of Palawa morphology will clarify some of the unresolved and more significant questions raised, but in overall percentage terms the further resolutions which will be achieved are likely to be small.

The problems referred to are exacerbated by the fact that there were a large number of dialects, and a number of different language groups (§ 5.2). Particularly in the case of unaccented segments, it is very difficult to determine whether or not the articulation of the segments varied from region to region. Again, etymological analyses may clarify the picture to some extent, but only minimally.

What is clear, is that there is little unequivocal evidence that the recorders were themselves inconsistent in their application of the various systems of spelling conventions they respectively used. There are some doubts with respect to Milligan (§ 7.5.1.4), but most of the others were well-educated men, and in the case of the French maritime explorers, Gaimard, and Cunningham were scientists. Their education and training is likely to have instilled in those of them who were major and constant recorders, a careful disposition towards the recording of Palawa words as unfamiliar foreign words, and it is improbable that the need for consistency would not have been well understood by them. That George Augustus Robinson was consistent, can be deduced from the fact that he recorded some 6,000 words, and there are no ascertained discrepancies in the way he applied either the orthographical systems employed by him. His transcriptions have been compared with the numerous transcriptions of Charles Robinson, his son, and more importantly with those of Sterling and Walker.

Nor is the position as grim as it might seem. Not only cross-linguistically, but in Palawa, the segments in word-initial position were remarkably stable (Hock 1991: passim all relevant contexts), and over many millennia (§ 7.6.8 and following). Over 50 per cent of the recorded vocabulary of Pallangamiddang, a language once spoken in the upper reaches of the Murray River has apparent cognates with words for the same objects and phenomena in the Palawa languages. See the table included as an insert. Compare also Table 7.6.3.4(a) (p.206), in which the great majority of the Pama-Nyungan words listed are apparent cognates of their Palawa counterparts in that both usually have fricatives in word-initial position which are all ostensibly consistent with a pronunciation shift from an apico-alveolar stop. Compare also the names for streams in listed Table 7.6.8.2, which indicate that the stability extended to certain segments in medial position, and in the case of eclipsis and epenthetic alliteration, the same patterns of change prevailed and were preserved on both sides of Bass Strait. Even in the case of the much more unstable segments in final position, and in the case of the liquids, there are recurring patterns which help their identification as members of sets of allophones. The major problem lies in the fact that in most contexts the vowels were not contrastive (§ 7.8.4), and as a result their articulation was very variable.

The fact that the provision of phonological representations is of so little utility (§ 2.5) may hinder, but does not prevent, further investigation of the Palawa languages. There is little doubt that most of the Palawa consonants and semi-vowels in initial position were articulated in much the same way as they are currently in the Indo-European and Pama-Nyungan languages. It is clear that there was considerable palatalisation and labiovelarization of the bilabial and dorso-velar stops (§§ 7.6.3.1, 7.6.3.2 and 7.6.7), but when these and other natural pronunciation shifts and changes are recognised, the original form of many segments can be determined. An understanding of Palawa morphology and semantic changes will remove many of the ambiguities created by eclipsis and epenthesis, not only in Palawa words, but also in Pama-Nyungan words. Classical Greek is a dead language in which there is considerable ambiguity with respect to the pronunciation of its vowels, and to a lesser extent its consonants. Similar comments apply with even greater force to those ancient languages that were recorded in cuneiform or as hieroglyphics, or which, when reproduced as alphabetical symbols, omitted the transcription of vowels. This has not precluded a study of those languages with a view to determining their internal development, their morphology, their syntax, and more generally their genetic relationships with other languages. There is no reason to conclude that similar studies of the Palawa languages cannot be usefully undertaken in conjunction with a parellel study of the Pama-Nyungan languages. In all probability instead of the phonemic representations familiar to students of the Pama-Nyungan languages, templates which reproduce an admittedly more skeletal representation of the progenitors of

Palawa and proto Australian words will provide instructive, and perhaps more efficient tools to aid the interpretation of Australian Aboriginal words.

The further discussion of the Palawa languages will involve a description of Palawa morphology; and a discussion of what can be inferred with repect to its grammar; and the semantic changes that have affected the development of its languages. These projects will be materially assisted by a comprehensive analysis of Palawa place names and clan names, and of a number of significant words in the Palawa ordinary lexicons with cognates in the Pama-Nyungan languages. The multiple tasks to be undertaken will be time consuming, and arduous, but an understanding of the matters raised in this chapter should now permit these further projects to proceed, and ultimately enable their achievement.

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Apparent Cognates in the Pallangamiddang & Palawa Languages

English	Pallangamiddang	Palawa
back	**kitha**	**ker.lar.ner**
bandicoot	**torra**	**tenna**
belly	**muluna**	**miulean**
bellyful	**pada murna**	**bel.en.pune.yer**
bird	**marrega**	**mouta**
bone	**kayila / kitha**	**kar.kup.pen.ner**
brain	**mandanye**	**nu.ner**
brother	**waangga**	**way.me** (*uncle*)
bush	**wagaga**	**wore.min.ner**
camp	**mani**	**noonameena** (*bush sleeping place*)
catch	**tuta-**	**tiackboorack** (*clutch*)
children	**marraga**	**moe.ker.er.**run.ner (*little child*)
corroboree	**koerdo**	**kar.loe.ge**n.ner (*dance*)
crow	**berrontha**	**pal.ler.rook.er**
day	**dandigunda**	**tagama**
dead	**barrona**	**parawar / poe.kane.er**
dream	**nanthibamithi**	**neacha puggaroamee**
dry	**koenge**	**karnaroide**
duck	**(duma**	**tee.ner**
wood duck	**(mullawur**	**malbina** (*drake*)
ear	**marramba**	**murn.ner**
eat	**tagadhi**	**tug.gun.ner**
emu	**marriya**	**nay.de.kar**
fat	**padarra**	**pangana** wayedeé
fish	**karrewa**	**cole.lap.pen.ner**
foot	**tjirra**	**taoonteckapé** (*stamp with foot*)
frost	**ada**	**oonadina**
give	**noganya**	**noki**
go	**nogureranner**	**gwe none.ta**
grass	**kambarru**	**kor.min.ner**
hair	**korrowa**	**keelana / cethana**
head	**buwa**	**buwar**
heat	**oueba**	**veen.ny** (*warm*)
hill	**padarr**	**poimena**
hungry	**banggowo**	**plönërpürtïck**
hut	**warri**	**wal.le** (*house*)
ice	**woloda**	**wor.thy**
kangaroo	**budju**	**plëäthënër**
kangaroo rat	**kima**	**koonah**
knee	**yuwa**	**ienebe**
lazy	**marrimuna**	**nee.moon.nar**
lie	**tonmana**	**tyangamoneeny** rapparé
lightning	**narra**	**nar.no.bun.ner**
liver	**puwala**	**pot.lone.ner** (*belly*)

English	Pallangamiddang	Palawa
bad	**purranda**	**pu.ter.lu.tic**
bark	**waarri**	**warra**
belly	**murrungga**	**morongui**
big	**pada**	**pawpela**
blood	**kurru**	**ko.ger / ken.ner**
bowels	**bugu**	**pläängänër**
breasts	**birri**	**pirrepirre**
burn	**bobintha**	**pue.ne.ac**
buttock	**turru**	**tur.roe.ger.ror** (movement of *buttocks*)
camping place	**bando**	**par.ler.now.**ween.ne (open camp of bushes)
chief	**pon.gam.bia**	**parng.er.**tit.yer
chin	**kida**	**kum.min.ner**
crayfish	**karda**	**knoi.kar**
cry	**kudji-**	**cockata** (*howl in distress*)
day	**kunda**	**kauna**
dive	**nogina**	**more.rar**
drink	**kanima-**	**kible**
drink	**tuymaladhi** watra	**dunepare**
hawk	**warrimu**	**wil.ler.de**
earth	**merri**	**mungara** meena (*sand*)
egg	**buwa / boya**	**pur.rer.teen.ner**
eye	**mii**	**moe.tane.ner**
father	**mama / mamga**	**mam.ma.nuke.er**
food	**tana**	**tune.pare**
frightened	**gamena**	**cum.bu.ler.ti**
fungi	**mangamanggi**	mone.nen.ner
give	**murdah**	**maré doungui**
good	**kayangi**	närrëh cöopëh
ground	**merri**	**man.en.ner**
hand	**marra**	ree – **mutha** also Palawa **nore.der** *left handed;* **marah** *five*
health	**wanangga**	**wore** rang.er.tam.ne (*very good* (health))
hot	**koneder**	**ken.duck**
hip	**kerrerro**	**care.wan.ner** (*thigh*)
husband	**pinederothu**	**pah — neena**
kip (*hut*)	**dumeguna**	**tem.en.ward.de.ker**
island	**duwaya**	**tar.ree.her**
big kangaroo	**marrawirra**	**now.wit.yer**
kill	**taga-**	**tärnür**
lagoon	**(ø)ewer**	**coo.ner**
leg, calf	**korramba**	**kum.meen.ner**
day	**pali**	**bur.re.wur.re** (*daylight*)
little	**payumuna**	**pär.vëe**
long way	**woda**	**wob.ber.roe**

lose the way	**wurrarragun'abi**	**ware.reng.en.ner**	*magpie*	**payorro**	**poirenyenna**
man	**tjerri**	**tal.lah**	*man, black*	**parrengoorrer**	**palawah**
man	**norrimjer**	**nar.re.wer**	*man*	**(morrangoorro**	**nāg.gĕr.dĕr**
man, old	**madega**	**neam.li.**clun.ni		**(marerder**	
moon	**huerra**	**car.ca.rer**	***mopoke***	bingamayi	**pār.rĕr.lōath.ĕr.nĕr**
mosquito	**molula**	**mōkĕrĕr**	*mother*	**bidja**	**pamena**
mountain	**buburra**	***Pip.pel.len.er.mur.ner*** (Mt. Blumont)	*mouth*	**dherra**	**toon gennar**
nails	**tirriwa**	**tur.ne**	*neck*	**worro**	**wun.ner.er** (*throat*)
(*never*	**wunangga**	**(war.eng.nee.ger** (*no*)	*night*	**tana**	**tone.non.you**
(*no*	**waanangga**	**(war.er.nathe.ick.er**	*nose*	**nar**	**mūegīnnĕ**
one	**korde**	**karde** (*five*) (literally *one handful*)	*parrot*	**torndo**	**tag.ger.rack**
penis	**nowwer**	**ma.rten.nur**	*plain*	**marenggo**	***Mar.ner.kone.ner*** *mut.ter.re* (country below Roland Range)
plenty	**nurru**	**nar.ner.won.er**	*possum*	**barra**	**pār.thĕl.lăr**
quiet	**pyer merde**	**par.rer.wal.yer** (*be quiet*)	*rain*	**nororner**	**mun.er.len.er**
reed	**moddoenger**	**mur.ter** (*long cutting grass*)	*river*	**kirru**	***Kar.ne*** *ket.tel.lay* (Hellyer River)
see	**nagadee**	**manga – namraga**	*shake hands*	**minedowenve**	**nun.ne.min.ner**
shout	**karringaroo**	**carney**	*sick*	**balana**	**poorannacalle**
sing	**kardo**	**(kar.ner.**ple.lar.ne **(kārndŭrrĕnăr** (*bark*)	*sit down*	**karra-**	**kar.lad.de.**gin.er
skin	**wada**	**wurra**	*sky*	**tetha**	**tōorĕenŭr**
sleep	**(murrngurra**	**(mar.ru.go**	*snake*	**kairngo**	**goomer / katal**
	(norungore	**(nenarongabea** (*asleep*)			
snow	**pinnarro**	**parattianah**	*speak*	**waya-**	**wungcarne**
spear	**karmoor**	**galubra**	*spear*	**mathangu**	**nar.len.ner**
spear, war	**wonda**	**war.de.**pen.ner (throw the *spear*)	*stand up*	**tanade**	**tackamuna**
star	**djimba**	**daledjae**	*stick*	**tauwa**	**tarra** koona (*switch*) (literally *wood* small)
stomach	**murunger**	**morongui** (*belly*)	*stone*	**pungga**	**pee.you.rer**
stump	**wadamanggi**	**(wad.de.ger** (*wood*) **(weealynghana** (*stump*)	*sulky*	**putbanda**	**(pye.ne poiré** tungaba (*cross*)
sun	**winbinbi**	**ween.yar**	*swan*	**(mywer**	**nar.ro.pat.ter.ne**
swim	**yakatbi**	**yar.gen.ner**	*take it*	**minedergo**	**munamara** (*abstract / deduct*)
testicle	**poengarer**	**pick.er.wot.ten.ner**	*that*	**nogar**	**mee.mer.rer**
thigh	**moneder**	**narn.ne.pin.er**	*thunder*	**mandarra**	**noi.yer.leer**
tired	**marrimuna**	***nee.moon.nar*** (*lazy*)	*tomorrow*	**(ø)uluth.lu**	**gon.dal.yer.roo***
tongue	**tharra**	**tullana / trow.wen.ner**			
tree	**wonda**	**(wul.lun.ner.**ly (*gum tree*) **(wēenăr** (*wood*)	*wood*	**tawa**	**tarraweenah** (*switch*) **tareengo** (*box tree*) **tor.ro.ner** (*gum tree*)
gum tree	**peearerer**	**poe.rick.er** (*stringy bark*)	*wattle tree*	**morroenggar**	**mung.en.nar** (*black wattle*)
two	**pulido**	**boulla**	*viscera*	**poorgo**	**paing.er.ne**
wash	**taggura warrimadali**	**(tru.de** (war.ran.le.**nig.ger.er****	*water*	**warra**	**(warthawina** (*large river*)) ***War.roun.rim*** (Wanderer R)
water-hole	**bargo**	**blin.ne.**lare	*wet*	**tiauwerra**	**ty.wor** (*rain*)
where	**wandac**	**wabbara**	*whistle*	**(ø)uambineethah**	**plubeab*****
wife	**pandjarrerrego**	**(per.ne.ner** (*your wife*) **(pie.ther.pull.ta** (*old woman*)	*woman* *old woman*	**djerri** **djerriga**	**ting.er.ner.ver**
young woman	**nowwardergar**	**nar.ner.kome.mer.lap.pee**			
windpipe	**pungarne**	**pale.wet.ter** (*neck*)	*wrist*	**toneyarerge**	**te.ver.mur.rick**

yes **yow / yeo** **erré**

* Words for *today / tomorrow / yesterday* are compound words, and as yet poorly understood. Speculatively the classifier is a reflex of proto Australian (proto African ?) *ŋuŋ = *thing in a state of existence.* The item is more clearly a type 5 word for *light,* and related to type 5 words for *spark / flame.*

** The Pallangamiddang phrase was recorded in Palawa as two separate words. They are both post 15,000 BCE imports. It is suggested that /**taggura**/ / <**tru.de**> are type 5 words for a stream, and do not directly refer to the act of washing as such. <**warrima**> and <**war.ran.le**> present as well preserved late Pleistocene type 4 words for a stream. <**dali**> is more obscure. But it presents as a contracted and/or semantically modified form of a verbal noun preserved in Palawa as <**leg'ŭrnĕr**> = *wash* in which <**leg**> = *water,* and <(ø)**ŭrnĕr**> = *action.* In other words in <**n**ig.ger.er> there has been eclipsis of the [l], followed by epenthetic alliteration which involved [**n**] as the final segment in an earlier form of <**war.ran.le**>.

*** The Palawa word evidences labiovelarization. In other words after the dissimilation of [**p^{w}**], [p] was lost in the Pallangamiddang word.